

# The Lambros Group: a Late Geometric Grave Group between Attica and the East

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To Hans Georg Niemeyer  
on the occasion of his 60th birthday.

In 1912 an important lot of Attic Geometric pottery was sold at the Paris auction house Hotel Drouot. The 21 pieces of pottery belonged to the collection of the late Jean P. Lambros from Athens and, according to the auction catalogue, were found together<sup>1</sup>. Apart from a small Proto-Attic mug (no. 14; *Fig. 34*)<sup>2</sup>, there seems to be no reason to doubt this statement, and it is argued here that they once formed the inventory of a single Attic grave. The importance of the Lambros group, as this ensemble was called then, was soon acknowledged by B. Schweitzer, who, already in 1918, discussed it in an appendix to his article on the Geometric style in Greece<sup>3</sup>. With a keen eye and shrewd mind he observed many formal and decorative links with the East and mainly with Cyprus, in a way unparalleled until then:

*“Hiernach kann, wie ich glaube, nicht mehr bestritten werden, daß in den letzten Zeiten der geometrischen Periode sich, mittelbar oder unmittelbar, kyprischer Einfluß in Attika geltend macht”*<sup>4</sup>.

Although individual pieces of the Lambros Group have received some attention in the past, and J. M. Davison even distinguished a ‘Lambros Workshop’ named after the giant oinochoe no. 2 (*Figs. 5-6*)<sup>5</sup>, the group as a whole and its dependence upon Cypriot and Phoenician pottery yet were never investigated thoroughly. This is all the more surprising since the subject of Cypriot-Greek relations has become quite popular amongst scholars, profiting from this century’s progress in archaeology both in Cyprus and Greece. Moreover, the advances made in the field of Greek, Cypriot and Phoenician pottery since the first discussion of the Lambros Group in 1918, would invite a reconsideration of the formal and decorative links within this group. Even more so, since the date of the group, LG Ib – LG IIA<sup>6</sup>, marks a period in which the intense contacts between Attica and Cyprus are thought to have declined rapidly – after a culmination in the MG period<sup>7</sup>. Therefore, by re-examining the group 75 years after its first discussion, it seems appropriate to mark another anniversary, that of an

archaeologist who dedicated a considerable part of his scholarly life to the study of East-West relations<sup>8</sup>.

Thanks are due to Dr J.-C. Balty, Professor H. A. G. Brijder, Mr S. W. G. de Clercq, Mrs S. M. Lubsen-Admiraal, Dr C. Tytgat and Dr D. Williams for kindly supplying photographs or allowing us to study material under their care.

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<sup>1</sup> Sale Drouot 1912, 6: “Ces vases proviennent d’une même trouvaille (...)”. Only K. Friis Johansen (1961, 23-24) has questioned the statement that they should form one group. Already in the discussion by N. Himmelmann-Wildschütz (1961, 2, 19-20 n. 22) this doubt could be reduced to the Proto-Attic mug only. Nevertheless, he kept a certain reservation in speaking of “(...) aus der angeblichen Fundgruppe Lambros (...)”, Himmelmann-Wildschütz 1961, 1, 1 or “(...) in dem angeblich geschlossenen Fund früherer Sammlung Lambros (...)”, Himmelmann-Wildschütz 1961, 2, 10. Also other scholars kept their reservations in speaking of “a presumed grave group” (Davison 1961, 63) or “(...) allegedly a closed deposit (...)” (Coldstream 1968, 46).

<sup>2</sup> Already in 1923, E. Pfuhl considered this mug to be dated later than the other vessels, Pfuhl 1923 (I), 71.

<sup>3</sup> Schweitzer 1918, 138-152 pls. 2-6.

<sup>4</sup> Schweitzer 1918, 148.

<sup>5</sup> Davison 1961, 63-65, 93-94, 152, following a first association by P. Kahane (1940, 475); Coldstream 1968, 44-45, attributing also the pitcher Nr. 1 (*Figs. 1-4*) to the workshop.

<sup>6</sup> One would generally classify the group as Attic Late Geometric dating to about 750-720 B.C. in Coldstream’s chronology (Coldstream 1968, 330-331).

<sup>7</sup> Coldstream 1977, 132-135.

<sup>8</sup> What follows is a brief bibliography of H.G. Niemeyer, with publications on this very subject: Zwei Fragmente ostgriechischer Schalen von Toscanos, *ArchEPA* 44, 1971, 152-156; Orient im Okzident. Die Phöniker in Spanien. Ergebnisse der Ausgrabungen in der archäologischen Zone von Torre del Mar (Málaga), *MDOG* 104, 1972, 5-44; (editor) Phönizier im Westen. *Die Beiträge des Internationalen Symposiums über ‘Die phönizische Expansion im westlichen Mittelmeerraum’ in Köln vom 24. bis 27. April 1979.* (MB 8), Mainz 1982; Una anfora Chiota procedente de Toscanos, in: *Homenaje al Prof. Martin Almagro Basch* II, Madrid 1983, 253-258; Die Phönizier und die Mittelmeerwelt im Zeitalter Homers. Zweite Theodor Mommsen-Vorlesung 1983, *JbZMusMainz* 31, 1984,

The Lambros Group is comprised of 21 vases, 20 of which – on account of their close chronological coherence – would most likely have belonged together. They are numbered consecutively, following the sequence of the 1912 auction. The Proto-Attic mug (no. 14, *Fig. 34*), apparently does not belong to the group, but is kept in this catalogue.

Only the two lekythoi nos. 8 and 9, which are now in the Netherlands, could be described after autopsy. The descriptions of nos. 1, 2 and 5 mainly follow those in the respective CVA's, although a few additions and corrections were made. The pitcher no. 4, now in the British Museum, London, as well as the three vases in the Musée du Cinquenaire at Brussels (nos. 3, 12 and 20), could be described after excellent new museum photographs. All other descriptions were made after the photographs already published in the auction catalogue of 1912, which proved to be by far better than the reproductions of Schweitzer's article in *Athenische Mitteilungen* of 1918. Measurements are given in cms; colour indications refer to *Munsell Soil Color Charts* of 1973. Linear ornaments and single motifs are defined according to J. N. Coldstream's glossary<sup>9</sup>.

The measurements indicated in the auction catalogue are not very accurate. Discrepancies could be noted several times, when measurements were taken by us or given by the authors of the respective CVA's<sup>10</sup>. Therefore, the measurements of nos. 4, 6, 7, 10, 11, 13-19 and 21 should be used with caution.

*1a. Pitcher (Figs. 1-4)*

Kassel, Antikenabteilung der Staatlichen Kunstsammlungen Inv. T.548.a.

Measurements: height 52; diam. (max.) 26.5, diam (mouth) 19.8, diam (base) 12.5.

Condition: complete; restored from many fragments, decoration in some places worn.

Fabric: Attic clay.

Shape: flat base; ovoid body, upper part with shallow vertical mouldings (gadrooning), leaving plastic leaf-shaped ribs between; almost cylindrical neck, widening towards plain mouth; broad strap handle, nearly parallel to neck contour, rising from upper part of the body, to well over the rim, and sharply bent back to the rim; handle is reinforced with three horizontal struts.

Decoration: black to dark brown glaze. Band around base, on lower body four zones of linear ornament, framed and separated by zones of three horizontal lines: dotted (?) triangles in double outline, chain of dotted lozenges with dots between, hatched meander, and chain

of dotted lozenges. Vertical decoration on upper body, consisting of tongues on the plastic ribs, in double (occasionally triple) outline, filled with superimposed zigzags; on the shallow mouldings chains of dotted lozenges. On the neck four zones, again framed and separated by zones of three horizontal lines: hatched meander, high metopal zone, hatched serpent line, and triple zigzag. The high metopal zone consists of a central hatched swastika with extra hooks and two lateral panels with hatched octofoils, each framed by triglyphs of vertical single steep zigzag, superimposed horizontal zigzags, and again vertical single steep zigzag, separated and bordered by vertical zones of four lines. The spaces between the leaves of the octofoils are occupied by cross-hatched triangles. Edges of handle are decorated with round tangential blobs; on the exterior, in a two-lined frame, a dotted serpent winds between alternating cross-hatched triangles, its head touching the mouth of the vase; to the left of it a small bird in silhouette, facing right. The three struts show rings. On the mouth groups of strokes, probably originally corresponding with the groups of strokes on the edges of the lid (see below); on the interior of the mouth a horizontal line.

Bibliography: Sale Drouot 1912, 3 pl. 1,1; Schweitzer 1918, 139 pl. 2,1; Pfuhl 1923 (I), 70; Kahane 1940, 475-476; von Buttlar 1948, 21 no. 196 pl. 14 fig. 13 (lid does not belong); Himmelmann-Wildschütz 1961,2, 19-20 with n. 22; Coldstream 1968, 44, 46; CVA Kassel (1972) (1) 20 pl. 4; Yfantidis 1990, 101-102 pl. 44.

1-94; Griechische Keramik in phönizischen Faktoreien. Der Befund der Kampagne 1967 in Toscanos (Málaga), in: H.A.G. Brijder (ed.), *Ancient Greek and Related Pottery. Proceedings of the International Vase Symposium in Amsterdam (12-15 April 1984)*, Amsterdam 1984, 212-217; Cerámica griega en factorías fenicias. Un análisis de los materiales de la campaña de 1967 en Toscanos (Málaga), in: *Céramiques Gregues i Hellenistiques à la Peninsula Iberica, Taula Rodona Empúries 1983. Monografies Emporitanes 7* (1985) [1987], 27-36; *Das frühe Karthago und die phönizische Expansion im Mittelmeerraum*. Veröffentlichungen der Joachim Jungius-Gesellschaft der Wissenschaften Hamburg 60, Göttingen 1989; E villis leonem? – Archäologischer Befund und historische Deutung, in: *Festschrift für Wolfgang Hübener zu seinem 65. Geburtstag*, Neumünster 1989, 67-71; The Greeks and the Far West. Towards a Revaluation of the Archaeological Record of Spain, in: *La Magna Grecia e il lontano Occidente. Atti del ventinovesimo convegno di studi sulla Magna Grecia, Taranto, 6-11 ottobre 1989*, Napels 1990, 29-53; The Phoenicians in the Mediterranean. A non-Greek model for Expansion and Settlement in Antiquity, in: J.-P. Descœudres ed.: *Greek Colonists and Native Populations. Proceedings of the First Australian Congress of Classical Archaeology*, Sydney 1985, Canberra – Oxford 1990, 469-489; (co-editor) – U. Gehrig, *Die Phönizier im Zeitalter Homers. Ausstellungskatalog Kestner-Museum Hannover 14. Sept. 1990 – 25. Nov. 1990*, Mainz; Die Griechen und die Iberische Halbinsel. Zur historischen Deutung der archäologischen Zeugnisse, *HambBeitrA* 15/17, 1988/90 [1992], 269-306.

<sup>9</sup> Coldstream 1968, esp. 395-397.

<sup>10</sup> No. 1: height 52 instead of 59, no. 2: height 47.2 instead of 44, no. 4: height 36.5 instead of 35, no. 5: height 22 instead of 21, no. 8: height 18.5 instead of 18, no. 9: height 9.5 instead of 8.5, no. 12: height 16.5 instead of 15, no. 20: height 8.5 instead of 7.5 and diam. 15.5 instead of 12.



Fig. 1. Lambros pitcher no. 1. Kassel, Antikenabteilung der Staatlichen Kunstsammlungen Inv. T.548,a. After CVA Kassel (1) pl. 4,4.



Fig. 2. Lambros pitcher no. 1. Kassel, Antikenabteilung der Staatlichen Kunstsammlungen Inv. T.548,a. After CVA Kassel (1) pl. 4,2.



Fig. 3. Lambros pitcher no. 1 with lid. Kassel, Antikenabteilung der Staatlichen Kunstsammlungen Inv. T.548,a. After Sale Drouot 1912, pl. 1,1.



Fig. 4. Lambros pitcher no. 1. Kassel, Antikenabteilung der Staatlichen Kunstsammlungen Inv. T.548,a. After CVA Kassel (1) pl. 4,3.



*1b. Lid (Fig. 3)*

Lost (Originally Kassel, Antikenabteilung der Staatlichen Kunstsammlungen?)<sup>11</sup>.

Measurements: unknown.

Fabric: Attic clay.

Shape: concave lid, with handle in centre, consisting of a round column on which a modelled bird.

Decoration: black glaze. On the edges groups of strokes, probably originally corresponding with the same motif on the edge of the mouth (see above). The upper side of the lid probably covered completely with black glaze, set off at the edge with two horizontal lines. Check pattern on handle column, separated from the bird above by four horizontal lines. The body of the bird is decorated with two horizontal zones, a chain of dotted lozenges and a zigzag, each set between two lines, and separated from each other by a single line. Above another line and a broader band the neck of the bird is marked by a double zigzag; the head executed in black with the eyes reserved and dotted.

Bibliography: see 1a.

*2a. Giant oinochoe (Figs. 5-6)*

Basle, Antikenmuseum Inv. BS 1953.09.

Measurements: height 47.2; diameter (base) 14.5, (mouth) 12, (max) 29.2.

Condition: complete; lower part reassembled from a few large fragments, some restorations, decoration worn on handle-side and lower front.

Fabric: yellowish red (5 YR 5/6) clay, with very few white inclusions (lime?) and few mica, not very hard-fired.

Shape: torus foot, globular body with two knobs ('breasts') on front, high neck with trefoil mouth. Strap handle rising from shoulder to the rim, reinforced with a single strut to the neck. The edges of the handle are furnished with two vertical grooves on the exterior.

Decoration: lustrous black glaze, in places thinner, yellowish red (5 YR 5/6), red (10 R 4/6-4/8) to dark red (10 R 3/6). Black zone around base, above which the whole surface of body and neck is decorated with friezes of varying height, separated by zones of three horizontal lines. The lower half of the body is painted with two zones of equal height: triangles in double outline, above which a file of birds in silhouette facing right. The central part of the body consists of two high zones of linear ornament, framed and separated by three minor zones with chains of dotted lozenges (the lowest of which is of the variant with dots inbetween). The lower of the two high zones is decorated with a hatched serpent line, the upper one with a hatched meander. The upper part of the body consists of a high metopal zone with a central hatched meander, swastika with extra hooks and two lateral panels with hatched octofoils; the space between the leaves is occupied by cross-hatched triangles. The three panels are separated by two triglyphs of vertical single steep zigzag and superimposed horizontal zigzags, separated and bordered by vertical zones of four lines. To the sides of the handle the lateral panels are bordered by simpler triglyphs of superimposed horizontal zigzags between vertical zones of four lines. The area around the handle is covered with black glaze, which continues in

an upward direction on the back of the neck. A zone of single steep zigzag separates the neck from the body. The lower part of the neck is occupied by a file of birds in silhouette facing right with dotted rosettes and diagonal dotted lines in-between. The central part of the neck consists of a high zone with a hatched serpent line, bordered by two minor zones with chains of dotted lozenges. The transition from neck to trefoil mouth is marked with a black band, above which comes the last zone of three horizontal lines, which separated the friezes. The lip is decorated with a line of chevrons; the edge with a simple line. The handle is hatched diagonally on the edges; on the exterior, within the two framing vertical grooves, a dotted serpent winds up between alternating cross-hatched triangles, its head touching the mouth of the vase; to the side of it a dotted rosette. Two horizontal strokes separate the handle attachment from the mouth. The strut is painted black.

Bibliography: Sale Drouot 1912, 3 pl. 1,2; Schweitzer 1918, 139 pl. 2,2; Pfuhl 1923 (I) 70; Kahane 1940, 475; MuM 11 (1953) 30 pls. 11,306. 12,306; Schefold 1955, 12-13 pl. 1; Schefold 1960, no. 42; Davison 1961, 63, 93-94, 152 fig. 86; Himmelmann-Wildschütz 1961,2, 19-20 with n. 22; Schefold 1966, 48 (62.3); Coldstream 1968, 44-46; Schefold 1974, 6-7 fig. 5; CVA Basle (1981) (1) 18 pls. 2. 3,1.

*2b. Lid (Fig. 6)*

Lost (between 1912 and 1953).

Measurements: unknown.

Fabric: Attic clay

Shape: concave lid, trefoiled shape, probably originally provided with a modelled clay bird on small column<sup>12</sup>. Decoration: not visible on the early photos; Sale Drouot 1912, pl. 1,2 and Schweitzer 1918, pl. 2,2.

Bibliography: see 2a.

*3. Pitcher (Figs. 7-11)*

Brussels, Musées Royaux d'Art et d'Histoire (Cinquante-naire) Inv. A 1941.

Measurements: height 36.5; diameter (max) 19.

Condition: fair; reassembled from a few large fragments, minor repairs, decoration partly worn off and flaking.

Fabric: buff Attic clay.

Shape: torus foot, tall ovoid body, straight sides and rounded shoulder; wide, cylindrical/slightly concave neck, wide mouth with plain everted rim; two vertical mouldings indicate a spouted mouth; broad vertical strap handle from shoulder to well over the mouth, sharply bent downwards towards the rim, flanked by single winding rolls at the edges, representing serpents.

<sup>11</sup> Yet in 1990 the description in a museum catalogue erroneously considered the lid, depicted in CVA Kassel (1) (T.548,b on pl. 5,11), as the original lid belonging to the pitcher, Yfantidis 1990, 102.

<sup>12</sup> Also the lid of the closest parallel for the oinochoe, belonging to the Lambros Workshop too, Athens 178 from the Kerameikos, has a bird as a handle; Wide 1899, 211 fig. 87; Collignon et Couve 1902/04, 60, cat. 238, pl. 13,238.



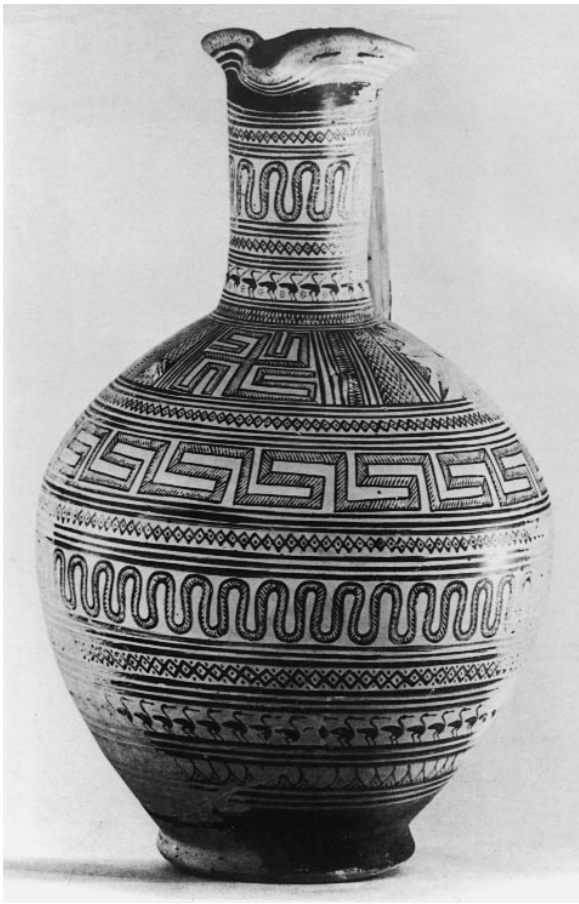


Fig. 5. Lambros giant oinochoe no. 2. Basle, Antikenmuseum Inv. BS 1953.09. After CVA Basle (1) pl. 2,2.

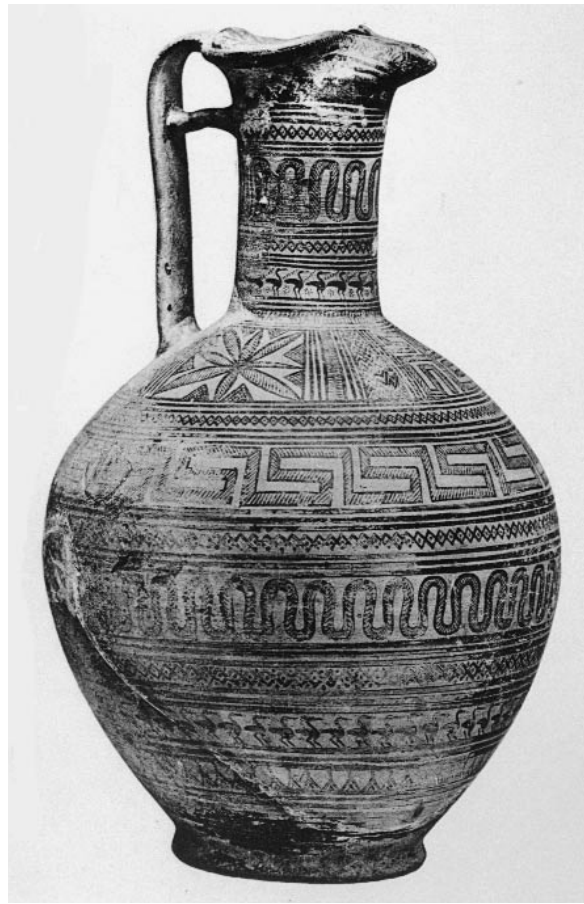


Fig. 6. Lambros giant oinochoe no. 2 with lid. Basle, Antikenmuseum Inv. BS 1953.09. After Sale Drouot 1912, pl. 1,2.

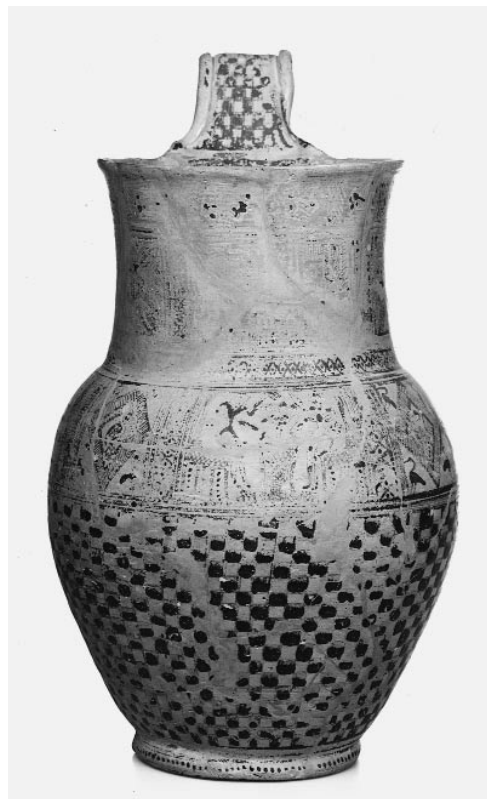
Decoration: brown to black glaze. Base: single dotted line between horizontal lines. Lower half of the body: broad chequered zone between double horizontal lines. Shoulder: high metopal zone between double horizontal lines. The central panel (Fig. 11) depicts two (female?) figures, facing each other, seated on four-legged chairs with high backs<sup>13</sup>, having their feet rested on four-legged footstools. In their hands they hold elongated objects ('rattles'). Between them a cauldron on high curved legs, apparently ending in attachments above the rim; bird standing on top of the cauldron, facing right. Except for the two figures, which are painted in silhouette, all objects on the panel are in outline and cross-hatched. The area between the legs of the chairs is filled with vertical decoration: dotted lines and tangential dotted circles in the centre. Other filling ornaments: swastikas between figures and backs of seats, small eight-pointed stars on both sides of the bird, hanging cross-hatched triangle in the centre. The six lateral panels are divided into two groups of three each: on each side, the central panel consists of a hatched swastika with tangential dotted

circles as filling ornament; the panels to the sides have large lozenges in hatched double outline, with single birds in the middle, facing towards the central figured panel. The birds are in outline and cross-hatched. The lozenges are filled with smaller cross-hatched lozenges and dotted lines. The four corners of these lateral panels are filled with birds in outline, placed antithetically, dotted rosettes and dotted circles in dotted outline. The panels are separated and, to the right of the handle attachment, bordered by cross-hatched triglyphs in triple outline, except for those framing the central panel, which have a vertical dotted lozenge chain in triple outline. The triglyph to the left of the handle attachment consists of three vertical lines only, which continue up to the rim and, in combination with the triple line of the triglyph on

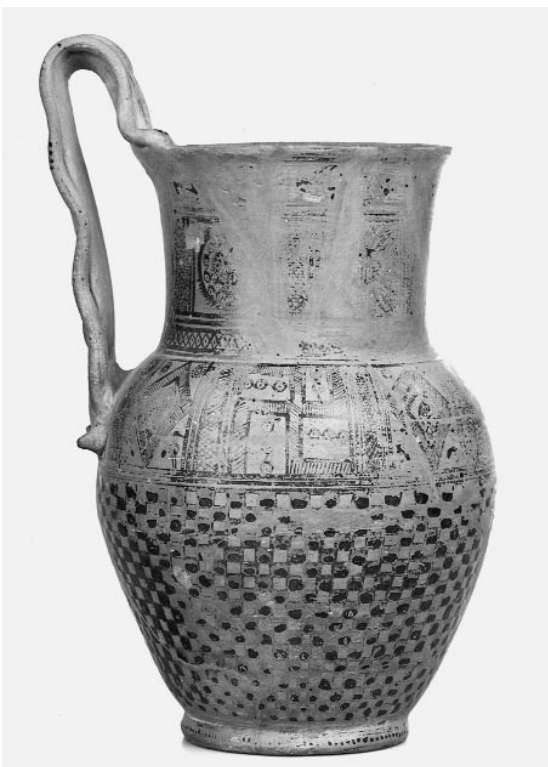
<sup>13</sup> The fourth leg of each chair overlaps with the outer vertical line of the triglyph and is raised to the top of the panel, thus giving the effect of a double high back. What is probably meant is a single back; contra T. Rombos (1988, pl. 47g), whose drawing is rather misleading, while only partly copied.



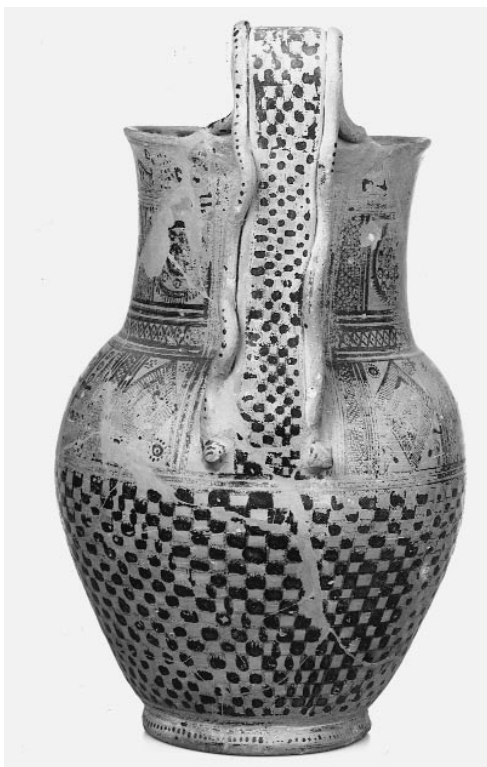
*Fig. 7. Lambros pitcher no. 3. Brussels, Musées Royaux d'Art et d'Histoire Inv. A.1941. (Photo A.C.L.).*



*Fig. 8. Lambros pitcher no. 3. Brussels, Musées Royaux d'Art et d'Histoire Inv. A.1941. (Photo A.C.L.).*



*Fig. 9. Lambros pitcher no. 3. Brussels, Musées Royaux d'Art et d'Histoire Inv. A.1941. (Photo A.C.L.).*



*Fig. 10. Lambros pitcher no. 3. Brussels, Musées Royaux d'Art et d'Histoire Inv. A.1941. (Photo A.C.L.).*





Fig. 11. Lambros pitcher no. 3, detail of 'Rattle Scene'. Brussels, Musées Royaux d'Art et d'Histoire Inv. A.1941. (Photo A.C.L.).

the other side, frame the handle zone. Transition to the neck: chain of dotted lozenges between single horizontal lines. Neck: high metopal zone between double horizontal lines. Between the two vertical mouldings the two central panels, which are heavily worn off, seem to have depicted hatched swastikas with tangential dotted circles as filling ornament; two of the lateral panels consist of quatrefoils with central chequered circles and hatched leaves in double outline; as filling ornaments occur birds in silhouette, cross-hatched triangles, dotted rosettes, dotted lines, stacked chevrons and swastikas; the two panels beside the handle consist of large sunburst motifs. The panels are separated and, to the right of the handle attachment, bordered by cross-hatched triglyphs in triple outline. Mouth: narrow animal frieze between single horizontal lines: quadrupeds (red deer) in silhouette facing right, probably depicted running, rather than kneeling, alternated by columns of multiple zigzag. Rim: double horizontal line. Back of handle: chequered zone. The two modelled serpents are decorated with dotted lines.

Bibliography: Sale Drouot 1912, 4 pl. 1,3; de Mot 1913, 20 fig. 6; Schweitzer 1918, 142. 150 pl. 2,3; Pfuhl 1923 (I), 70; CVA Brussels (1937) (2) III H b, pl. 1,2a-b; Cook 1946, 97 with n. 4; Hahland 1954, 177-179, 182, 185-186 pl. 12 fig. 9; Davison 1961, 59 with n. 12; Boardman 1966, 5 with n. 37; Ahlberg 1967, 178 with n. 10. 179, 183-184, 187 pl. 1d; Rombos 1988, 284-285, 293-295, 480, cat. 253 pl. 47g; Rystedt 1992, 125 with n. 5, 126-127 with fig. 3, 131-132 with n. 43.

#### 4. Pitcher (Figs. 12-14)

London, British Museum Inv. 1912.7-18.I.

Measurements: height 28 (?).

Condition: fair; reassembled from a few large fragments, minor repairs, decoration partly worn off and flaking.

Fabric: buff Attic clay.

Shape: low torus foot; wide ovoid body, slightly convex sides and rounded shoulder; wide cylindrical neck; wide mouth with plain everted rim; broad vertical strap handle rising from the shoulder to well over the mouth, sharply bent down towards the rim, and reinforced in the middle by a horizontal round strut.

Decoration: brown to black glaze. Body: base and lower part of the body in solid black, above which eight horizontal lines. Transition to shoulder: zone of horizontal tangential elongated blobs. Shoulder: high zone with dotted serpent line, winding between dotted rosettes, framed above and below by two minor zones of three horizontal lines. Transition to the neck: narrow zone of hatched triangles. Neck: high frieze with central pictorial scene, consisting of a warrior facing left, with its sword-hilt and helmet indicated, who holds two horses (stallions) at their bridles, all painted in silhouette. Three birds accompany the scene, drawn in outline with hatched bodies: two antithetical birds above the horses and one, facing left, between the warrior and the left horse. As filling ornaments a small swastika between the warrior and the right horse, small eight-pointed stars, dotted rosettes and dotted lines occur. The lateral parts



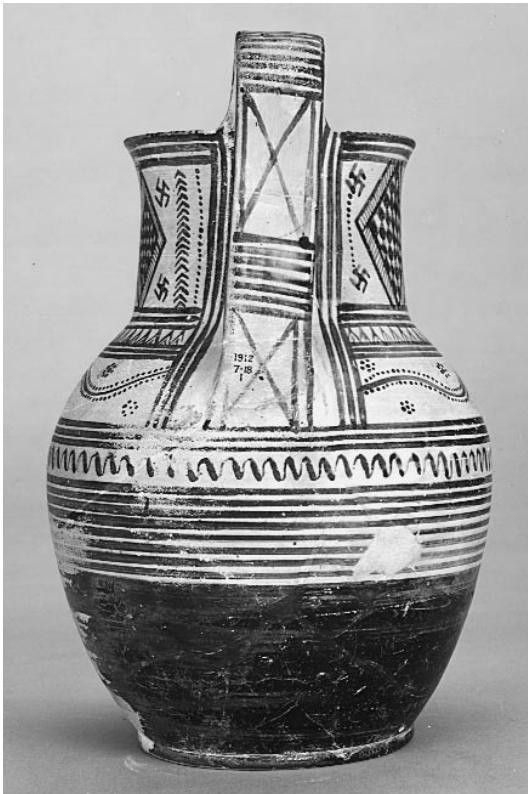
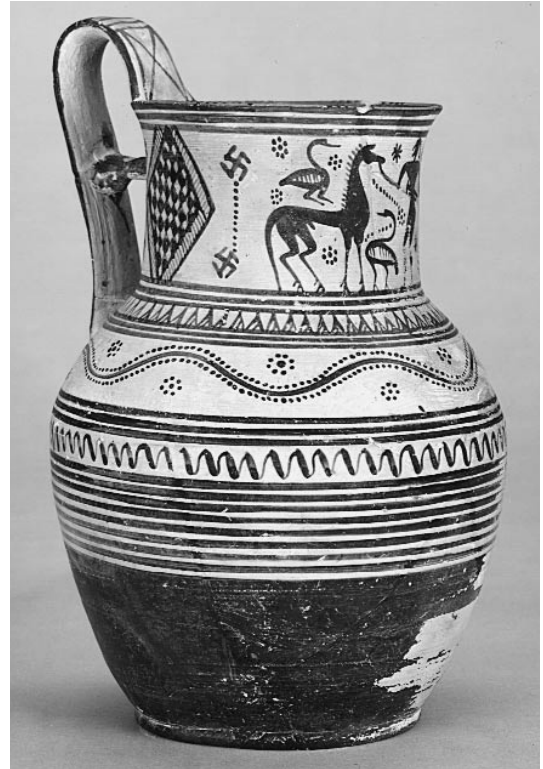
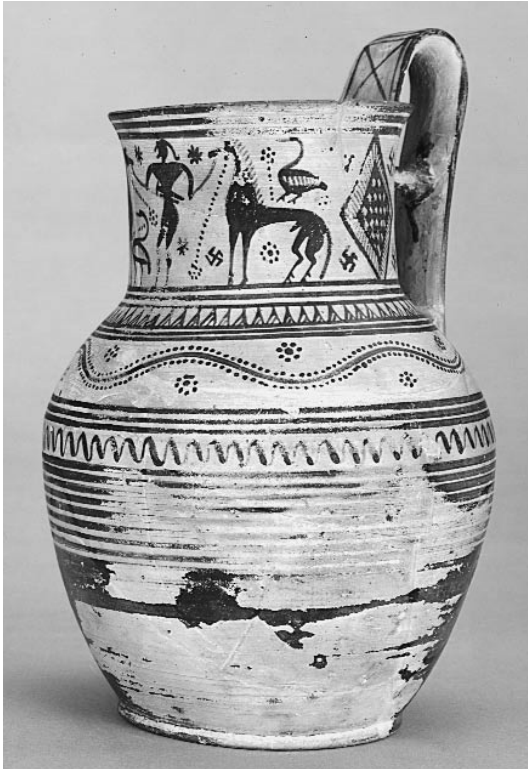


Fig. 12. Lambros pitcher no. 4. London, British Museum  
Inv. 1912.7-18.1. (Photo British Museum).  
Fig. 13. Lambros pitcher no. 4. London, British Museum  
Inv. 1912.7-18.1. (Photo British Museum).  
Fig. 14. Lambros pitcher no. 4. London, British Museum  
Inv. 1912.7-18.1. (Photo British Museum).

of the frieze, framing the handle, are decorated with two large chequered lozenges in double hatched outline. Surrounding them, on their four sides, small swastikas are used as filling ornaments; the left lateral field is even connected vertically by a dotted line. Between the right lateral field and the handle a chevron column and a vertical dotted line are painted. The handle zone is framed vertically by two triple lines from the lower handle attachment to the rim. The rim is decorated with groups of three to eight strokes. The back of the handle, framed at the edges by a vertical line, is covered with three single-crossed panels, separated by two groups of horizontal lines. Strut painted solid black.

Bibliography: Sale Drouot 1912, 4 pl. 3,4; Schweitzer 1918, 142, 150-152 pl. 4,5; Pfuhl 1923 (I), 70; Kübler 1954, 152; Corbett 1954, 67 with n. 3; Coldstream 1968, 77; Rombos 1988, 272 table 39.

#### 5. *Oinochoe* (Figs. 15-17)

Paris, Louvre Inv. CA 2509.

Measurements: height 22; diameter (max) 14.5.

Condition: fair; fragment of rim missing; hole in body, just below the shoulder to the right of the lower handle attachment.

Fabric: clay "*beige rosâtre*".

Shape: flat base, globular body, cylindrical neck ending in trefoil mouth. The handle, round in section, rises from the shoulder to the mouth and is slightly twisted<sup>14</sup>

Decoration: reddish brown glaze, in places fading and flaked off. The lower part of the body is decorated with five horizontal bands, above which a chequered zone framed by two minor zones of three horizontal lines. The central part of the body is marked by a high frieze with a figural scene. The 16 figures partaking of the scene are numbered consecutively from left to right, starting with the figure below the handle (Fig. 17). The description of the figures given by G. Ahlberg is so concise and applicable, that a mere quotation suffices, introducing the numbers of the figures in brackets and leaving out few of her interpretative lines<sup>15</sup>:

"Sixteen figures are represented, four Dipylon warriors (2, 5, 10, 12), eight warriors without shields but with helmets (1, 3, 6, 8, 9, 11, 13, 15), and in addition two helmeted figures lying horizontally in the field (7, 14). Two further figures are of a particular character (4, 16). The Dipylon warriors all represent the same type, that is, they are equipped with helmet, sword and dagger at the waist, but have no spears. The group of the figures nos. 1-3 consist of a central Dipylon warrior (2) turned to the right and at each side flanked by a warrior without a shield (1, 3), turned towards the former. The warrior to the left (1) touches with his left hand the sword-hilt. The attitude of his other arm is not clear. It has possibly something to do with the strange object or figure no. 16 at the left. The warrior without a shield to the right (3) overlaps with his right hand the sword-hilt and presumably also the dagger of the Dipylon warrior (2). It is uncertain whether the former has any weapon at his waist. The strange figure no. 4 differs from the others as to its shape, carriage and relation to the neighbouring figures. Its head seems to be larger than is usual and there are no traces of a helmet. His left arm is very thick

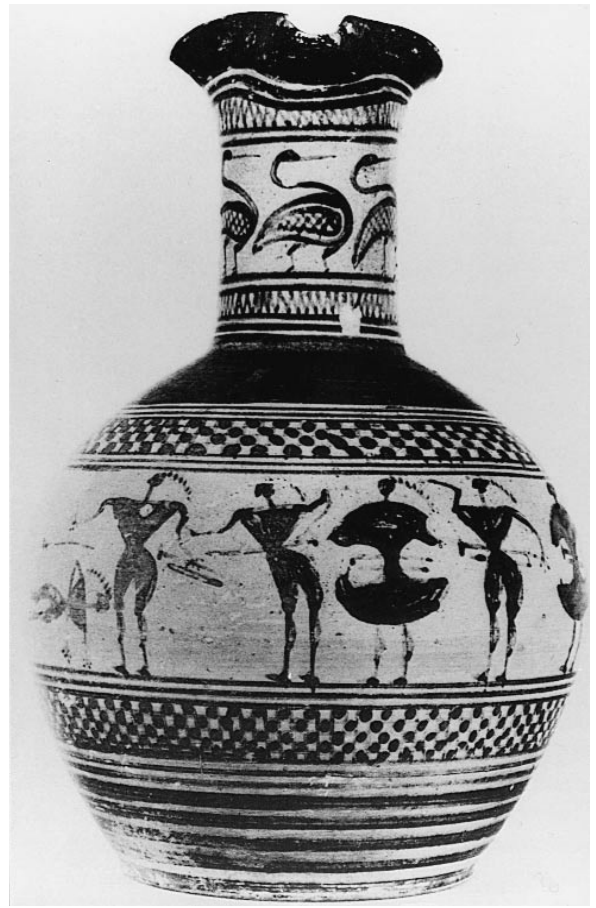
and ends in a hand, which is bigger than in other instances. It is very difficult to recognize the lower part of the right arm. To judge from the slight curve it has possibly been turned upwards. I [Ahlberg] am not sure of the relation of this figure to the warrior no. 3, who is turned away from him. There seem to be faint traces of paint above the head of no. 4, possibly parts of a bent arm overlapping the head. The hand of warrior no. 3 is probably visible to the left of the head of no. 4. The group formed by the figures nos. 5 and 6 gives a Dipylon warrior (5) turned to the right and, further to the right, confronting the latter, a warrior without a shield, but with a sword at his side (6). The warrior stretches his right hand towards the head of the Dipylon warrior (5) and with the other holds behind him an implement, which thus is held over the horizontally placed figure no. 7. This object occurs again in an identical situation in respect of warrior no. 13. The rather long object is grasped a good way from the point in position which makes it clear that it is not a weapon in actual use. I [Ahlberg] interpret the weapon as a spear, and from its being handled, and from the actions of the warriors nos. 6 and 13 directed towards the confronting warriors nos. 5 and 12, as taken from these warriors nos. 5 and 12 respectively. Figure no. 7 is lying horizontally somewhat above the base line, his arm hanging down and vertically and his fingertips touching the ground. The figure is certainly a corpse. It is worth while mentioning that this fallen warrior still has his helmet. In most instances corpses are represented without any armament and weapons. Nos. 8 and 9 render two warriors without a shield, both turned towards the left. Warrior no. 9 grasps the arm of the warrior in front of him, that is no. 8, and directs his sword towards the hand of the latter, who holds a sword and a dagger stretched out behind himself. That the warrior no. 9 is not drawing his sword is clear from the position of his sword. When not used the hilt would have been placed to the left of the waist. The attacking attitude of this warrior (9) is also apparent from his forward leaning carriage. The group nos. 10 and 11 consists of a Dipylon warrior and a warrior without a shield, both facing towards the left. The latter (11), furnished with sword and dagger across his waist, overlaps with his raised hand the crest of the helmet of the former (10). Further to the right is the group of warriors nos. 12 and 13, a Dipylon warrior and a warrior without a shield facing towards the left. The warrior without a shield (13) overlaps with his outstretched right hand the farther end of the Dipylon warrior's sword, and holds in the left hand, outstretched behind himself, an object identical with that handled by warrior no. 6. As in the former case the implement is held at some distance from the point, in the former case more rounded, here more oval. And, as in the previous instance, the object is held over the horizontally placed warrior to the right, here no. 14. The latter shows an attitude almost identical with that of no. 7. Also this time the

<sup>14</sup> See CVA Paris (1972) Louvre (16) pl. 16, 1.

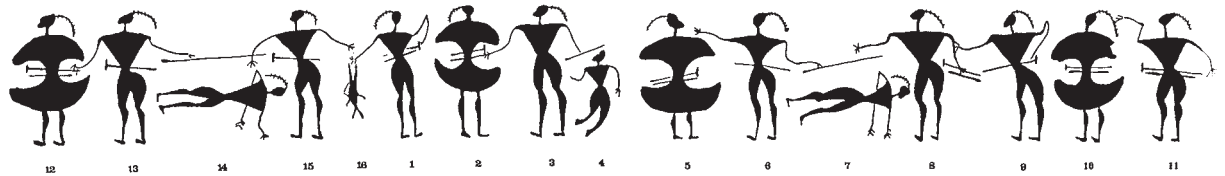
<sup>15</sup> Ahlberg 1971, 21-23. We thank G. Ahlberg-Cornell for her kind permission to quote her description of the figure frieze.



*Fig. 15. Lambros oinochoe no. 5. Paris, Louvre Inv. CA 2509. After CVA Paris Louvre (16) pl. 17,2.*



*Fig. 16. Lambros oinochoe no. 5. Paris, Louvre Inv. CA 2509. After CVA Paris Louvre (16) pl. 17,1.*



*Fig. 17. Lambros oinochoe no. 5, drawing of figure frieze. Paris, Louvre Inv. CA 2509. After CVA Paris Louvre (16) fig. 1.*



*fallen warrior still has his helmet on. The warrior no. 15 has no shield and is turned towards the corpse no. 14 to the left, away from the strange object or figure no. 16. The right hand of the warrior is visible immediately above the elbow of the corpse no. 14, but obviously not touching it."*

The paint of figure or object no. 16 is worn too much to allow for an objective description.

Above the central frieze another chequered zone, framed by two smaller zones of three horizontal lines, matches the one below. The upper part of the shoulder towards the transition to the neck is painted black. The neck is decorated with a high frieze with five birds facing right, bordered above and below by smaller zones of a zigzag between pairs of horizontal lines. The birds are rendered in outline with cross-hatched bodies; only the central bird is set apart in having its wing indicated by an extra line. In this case the cross-hatching is restricted to the wing only. The mouth of the jug is painted black on the outside. The handle is decorated with a double line along the sides, between which, on the exterior, a pattern of superimposed crosses. A double stroke marks the lower attachment of the handle.

Bibliography: Sale Drouot 1912, 4 pl. 2; Schweitzer 1918, 142, 148 pl. 3; Sale Drouot 1921, 23, nr. 159 pl. 7, 159; Schaal 1923, 18-19 with fig. 6; Pfuhl 1923 (I), 70; Hahland 1937, 129, n. 68; Kahane 1940, 475-476; Corbett 1954, 67 with n. 4; Webster 1955, 44 with n. 47; Marwitz 1959, 86, 93; Friis Johansen 1961; Himmelmann-Wildschütz 1961, 1, 1-5 pls. 2-3; Brommer 1961, 835; Kirk 1962, 284-285 pl. 5a; Brunnsäker 1962, 226 with n. 1; Friis Johansen 1967, 24; Metzger 1964, 116; Tölle 1964, 88, no. 144; Lesky 1964, 152; Boardman 1966, 2 with n. 13; Coldstream 1968, 38 with n. 4, 41 with n. 1, 75-76, 129 with n. 5; Fittschen 1969, 39-40, K 1 fig. 12; Schweitzer 1969, 49, 323 with n. 66 pl. 58; Ahlberg 1971, (no. A15) 12 with n. 26, 21-25 with figs. 19-24, 57, 104-105; CVA Paris (1972) Louvre (16) III H b, 15-17 fig. 1 pls. 16-17; Carter 1972, 53-54; Ahlberg-Cornell 1992, 28-29, 281 with fig. 33a-b.

#### 6. *Oinochoe* (Fig. 18)

Present whereabouts unknown.

Measurements: height 18 (?).

Condition: complete; decoration partly worn off.

Fabric: Attic clay (?).

Shape: flat 'string-cut' base; wide, depressed ovoid body with slightly convex sides and shoulder, narrow cylindrical/slightly concave neck with trefoil mouth and plain everted rim; double rolled handle from shoulder to rim.

Decoration: brown to black glaze. Base and body solid black. Shoulder: in the lower register six narrow-spaced and in the upper register three wide-spaced horizontal lines. The latter three leave room in the centre for a bird in outline with hatched body, standing on the lower register and facing right. As filling ornaments a floating zigzag line to each side of the neck and a dotted rosette to the left of its long legs are used. Neck: lower register with tangential dotted circles between two zones of three

horizontal lines; upper register and mouth are painted solid black. The inside is unpainted. Handle: vertical lines along the edges of the back; to the inner side of the handle two dots near the lower attachment and one single stroke at half height.

Bibliography: Sale Drouot 1912, 4 pl. 3,6; Schweitzer 1918, 139(?), 142 pl. 4,4; Marwitz 1959, 86, 92; Himmelmann-Wildschütz 1961,2, 11.

#### 7. *Oinochoe* (Fig. 19)

Present whereabouts unknown.

Measurements: height 20 (?).

Condition: complete; few repairs.

Fabric: Attic clay (?).

Shape: flat 'string-cut' base; globular body, narrow cylindrical neck with trefoil mouth and plain everted rim; single rolled handle from shoulder to rim.

Decoration: brown to black glaze. Base: single horizontal line. Body and shoulder: compass-drawn concentric circles on the two sides, consisting of eight broad circles around an eight-pointed star. The two systems of concentric circles are connected by a horizontal chequered bar in the centre, at half height. Three wide-spaced hanging wavy-lines below the bar and a long-necked bird above it. The bird is drawn in outline with hatched body, and faces left. Two small eight-pointed stars fill the field to the sides of its neck. Neck and mouth: three horizontal lines above the transition from body to neck and solid black up to the rim. Handle: vertical lines to the sides and probably a wavy-line or single serpent line over the back of the handle (see below).

Bibliography: Sale Drouot 1912, 5 pl. 4,7; Schweitzer 1918, 142-146 pl. 5,2; Pfuhl 1923 (I), 70, III pl. 2,6; Marwitz 1959, 87, 93-94; Himmelmann-Wildschütz 1961,2, 11; Coldstream 1968, 74-75; Rombos 1988, 486, cat. 268.

#### 8. *Lekythos* (Figs. 20-22)

Amsterdam, Allard Pierson Museum Inv. 3578.

Measurements: height 18.5; diameter (base) 4.8, (max) 11.9, (mouth) 4.9.

Condition: fair; handle broken; fragments of mouth missing, restored with plaster and modern ceramical fragment (see Sale Drouot 1912, pl. 3,8; Schweitzer 1918, pl. 4,1 for unrestored condition)<sup>16</sup>. Black glaze on neck partially flaked off.

Fabric: reddish yellow clay (5 YR 6/6); surface reddish yellow (5 YR 6/6) to yellowish red (5 YR 5/6).

Shape: low torus foot, conical body with a rather sharp transition to the flat shoulder. The neck, placed excentrically on the body, shows a neckridge and ends in a splayed mouth. The strap handle rises from the shoulder to the neckridge.

Decoration: matt black glaze, in places thinner, reddish brown (5 YR 4/6). The foot and lower part of the body

<sup>16</sup> Sometime between the sale in 1912 and its acquisition in 1927 by the Scheurleer Museum the mouth has seemingly been restored by inserting a modern plain black glazed rimsherd. One of the original fragments of the rim was found to adhere to the inside of the lekythos. This fragment was reinserted in the course of the restoration of the object in 1993.



Fig. 18. *Lambros oinochoe* no. 6. After Sale Drouot 1912, pl. 3,6.

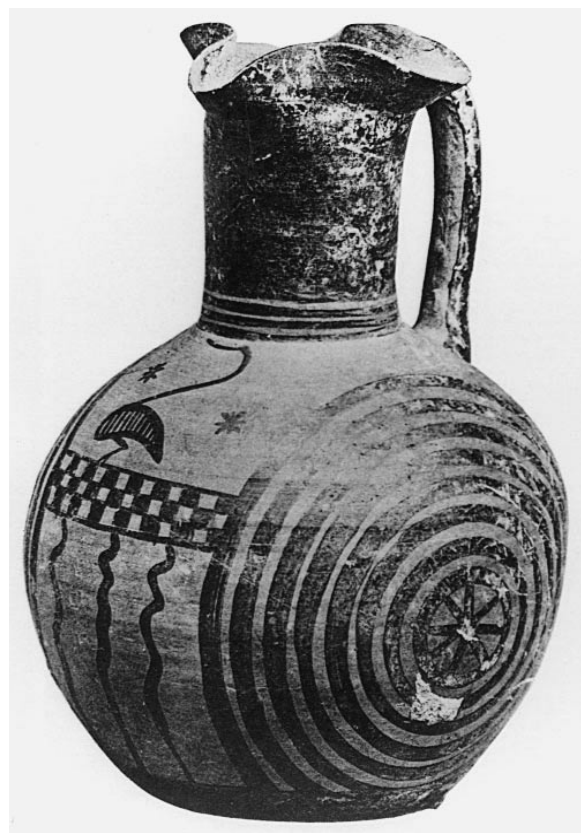


Fig. 19. *Lambros oinochoe* no. 7. After Sale Drouot 1912, pl. 4,7.

are decorated with three horizontal bands, separated and bordered above by zones of double horizontal lines. The body is covered with many narrow horizontal zones of linear decoration: triangles in double outline, single steep zigzag, chain of dotted lozenges with dots in-between, single steep zigzag and again a chain of dotted lozenges with dots in-between, each separated by zones of three horizontal lines. The transition to the shoulder is marked by a single steep zigzag, framed by a zone of five horizontal lines below and a zone of six above. The frieze on the shoulder consists of eight birds in silhouette facing right with dotted rosettes in-between. The transition from shoulder to neck is marked by three horizontal lines. The neck itself consists of three more or less equal zones: two high black bands, between which the neck-ridge zone is accentuated by a line of dots between a pair of triple horizontal lines. The mouth is marked by a narrow line of dots on the exterior and a black band on the interior. The decoration of the handle is framed by two lines along the sides and consists of two horizontal lines below, a multiple horizontal zigzag and, on top, six horizontal lines. The handle shows another pair of horizontal lines halfway on the inside.

Bibliography: Sale Drouot 1912, 5 pl. 3,8; Schweitzer 1918, 142, 146-148 pl. 4,1; Pfuhl 1923 (I), 70; CVA the Hague (1931) *The Netherlands* (2) III Hb.d. pl. 4,1; *Algemeene Gids* 1937, 123 nr. 1211 pl. 46; Kübler 1954, 154; Brann 1961, 138; Himmelmann-Wildschütz 1961,2, 19-20 with n. 22.

#### 9. *Small Lekythos* (Figs. 23-27)

Utrecht, University Museum Inv. Arch 27.

Measurements: height 9.6; diameter (base) 5.2, (max) 6.9, (mouth) 3.9.

Condition: fair; fragments of mouth missing, restored with plaster (see Sale Drouot 1912, pl. 5, 9; Schweitzer 1918, pl. 6, 5 for unrestored condition). Clay on places chipped off by large lime inclusions.

Fabric: very compact Attic clay, with few large lime inclusions and few mica. Surface polished, leatherlike appearance, self-slip, reddish yellow (5 YR 6/6 – 7.5 YR 7/6).

Shape: flat 'string-cut' base, pear-shaped body, cylindrical neck with neck-ridge in the middle, ending in a rather wide funnel-shaped mouth. The handle, round in section, is attached 'off-set' to the shoulder and to the

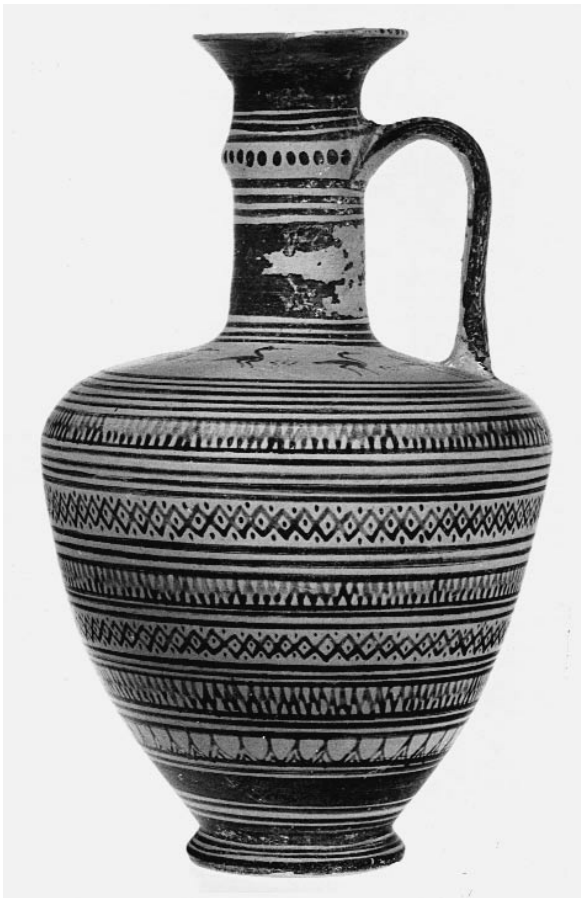


Fig. 20. *Lambros lekythos* no. 8. Amsterdam, Allard Pierson Museum Inv. 3578. (Photo M. Bootsman).

neck-ridge. The opposite side of the shoulder is trimmed with a lug.

Decoration: matt black glaze, in places fading by misfiring. The lower half of the body is decorated with a black band around the base, two horizontal lines, floating zigzag, and three horizontal lines. The upper half, framed above by a double horizontal line, shows a frieze of four birds in silhouette on either side facing right. The central knob, decorated with a dotted rosette, separates the two groups of birds. The neck decoration consists of three more or less equal zones: two high black bands, between which the neck-ridge zone is accentuated by a line of dots between a double horizontal line below and a single line above. The interior of the mouth is only partly painted black. The handle is decorated with four vertical lines, joining at the lower attachment.

Bibliography: Sale Drouot 1912, 5 pl. 5,9; Schweitzer 1918, 142, 146-147 pl. 6,5; Pfuhl 1923 (I), 70; Dier als motief, nr. 142.



Fig. 21. *Lambros lekythos* no. 8, detail of bird frieze. Amsterdam, Allard Pierson Museum Inv. 3578. (Photo M. Bootsman).

#### 10. Juglet (Fig. 28)

Present whereabouts unknown.

Measurements: height 10 (?).

Condition: almost complete; part of mouth missing; decoration in places thinner and partly worn off.

Fabric: Attic clay (?).

Shape: low base (low torus foot?). Globular body with short and narrow cylindrical/slightly concave neck with pinched/trefoil mouth and plain everted rim; wide single rolled handle from shoulder to rim.

Decoration: brown to black glaze. Base: single horizontal line. Body and shoulder: compass-drawn concentric circle design ('crossing system') of four mingling groups on both sides, front and on the back, below the handle; each group consists of three to four zones of narrow double or triple concentric circles and a small single circle in the centre, seemingly not responding to any rule. Neck and mouth: solid black up to the rim. Handle: vertical lines to the sides (?).

Bibliography: Sale Drouot 1912, 5 pl.5,10; Schweitzer 1918, 142-146 pl. 6,2; Pfuhl 1923 (I), 70; Coldstream 1968, 75 with n. 1.

#### 11. Tankard (fig. 29)

Present whereabouts unknown.

Measurements: height 17 (?).

Condition: complete; restored from a few large fragments.

Fabric: Attic clay (?).

Shape: flat base, convex lower body, above which a carination – at one third of the height – marks the transition to a concave beaker, widening towards its upper part. High strap handle, running almost parallel to the upper body, to well over the rim, in the middle joined to the side of the vase by a round strut, placed diagonally. Decoration: black glaze. The lower half of the convex part of the body painted solid black. The central part of





*Fig. 22. Lambros lekythos no. 8. Amsterdam, Allard Pierson Museum Inv. 3578. (Drawing Ch. Briese).*

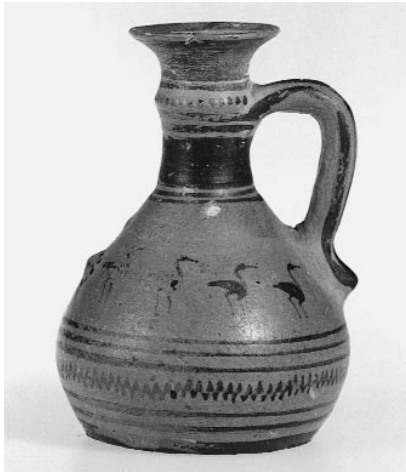


Fig. 23. Lambros small lekythos no. 9. Utrecht, University Museum Inv. Arch 27. (Photo J. P. Stolp).



Fig. 24. Lambros small lekythos no. 9. Utrecht, University Museum Inv. Arch 27. (Photo J. P. Stolp).

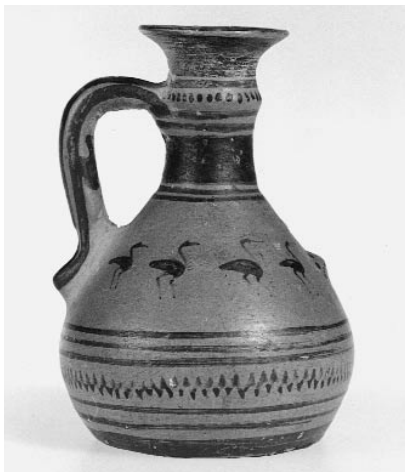


Fig. 25. Lambros small lekythos no. 9. Utrecht, University Museum Inv. Arch 27. (Photo J. P. Stolp).



Fig. 26. Lambros small lekythos no. 9. Utrecht, University Museum Inv. Arch 27. (Photo J.P. Stolp).

the vase is occupied by a high metopal zone, framed above and below by two zones of round (to elongated) tangential blobs between zones of three horizontal lines. The zone of horizontal lines at the transition to the concave upper part of the vase is marked by an additional line. The high metopal zone consists of a central hatched swastika with dotted rosettes between the hooks and two lateral panels, each with a bird facing towards the centre<sup>17</sup>. The birds are rendered in outline with hatched bodies; they are surrounded by three dotted rosettes and one swastika within a circle of dots. The triglyphs to the sides of the panels consist of vertical single steep zigzags between vertical zones of four lines. The interior of the mouth is decorated with, at least, two horizontal lines. The handle zone is bordered vertically by a single line. Concerning the decoration of the handle only the bordering vertical lines on the edges are visible and the ten or so horizontal strokes on top, facing the interior of the vase. The strut is either painted black or with circles or strokes. Bibliography: Sale Drouot 1912, 5 pls. 4,11. 5,11; Schweitzer 1918, 139 pls. 5,4. 6,8; Pfuhl 1923 (I), 71; Shoe 1932, 64 with n. 4; Kahane 1940, 475; Himmelmann-Wildschütz 1961,2, 10; Waslander 1984, 19, group 1B,12.

#### 12. Tankard (Figs. 30-33)

Brussels, Musées Royaux d'Art et d'Histoire (Cinquantenaire) Inv. A 1942.

Measurements: height 16,5; diameter (max) 13.

Condition: complete; upper part reassembled from a few large fragments; one missing rim fragment restored.

Fabric: clay and surface yellowish brown, "jaune brun". Shape: like no. 11.

Decoration: black to reddish brown glaze. Black band around the base, above which four horizontal lines and zone with a dotted serpent line. The central part of the vase is occupied by a high metopal zone, framed above and below by two zones of round tangential blobs between zones of three horizontal lines. Dotted tangential blobs near the mouth; the zone of horizontal lines above it, below the rim, consists of two lines only. The central panel of the high metopal zone depicts a horse (stallion) in silhouette facing right with a bird above and

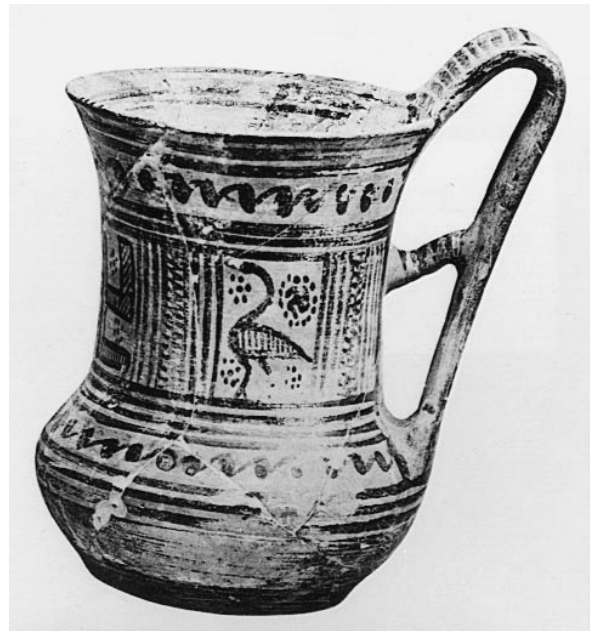
<sup>17</sup> Only one side of the tankard could be described after the photo in the auction catalogue. However, it is most likely that the other side should be reconstructed with the same panel, with a bird placed antithetically.



*Fig. 27. Lambros small lekythos no. 9. Utrecht, University Museum Inv. Arch 27. (Drawing Ch. Briese).*

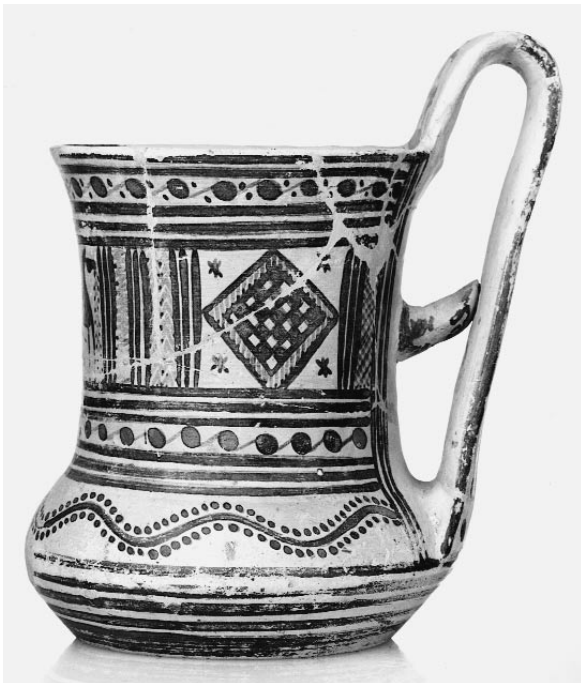


*Fig. 28. Lambros juglet no. 10. After Sale Drouot 1912, pl. 5,10.*

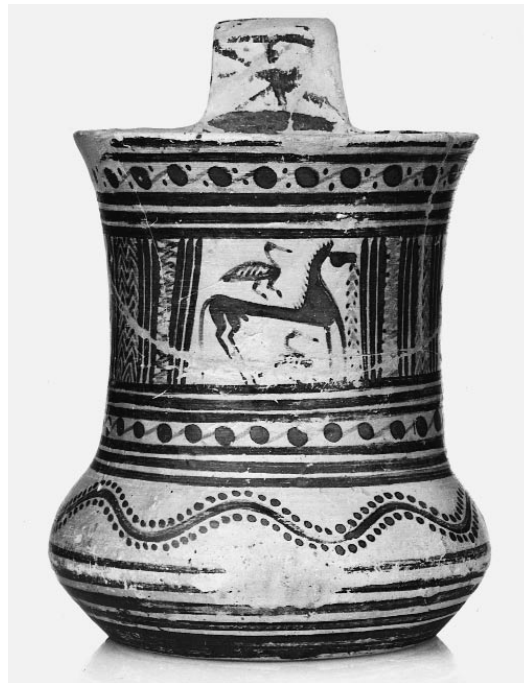


*Fig. 29. Lambros tankard no. 11. After Sale Drouot 1912, pl. 4,11.*





*Fig. 30. Lambros tankard no. 12. Brussels, Musées Royaux d'Art et d'Histoire Inv. A.1942. (Photo A.C.L.).*



*Fig. 31. Lambros tankard no. 12. Brussels, Musées Royaux d'Art et d'Histoire Inv. A.1942. (Photo A.C.L.).*



*Fig. 32. Lambros tankard no. 12. Brussels, Musées Royaux d'Art et d'Histoire Inv. A.1942. (Photo A.C.L.).*



*Fig. 33. Lambros tankard no. 12. Brussels, Musées Royaux d'Art et d'Histoire Inv. A.1942. (Photo A.C.L.).*



Fig. 34. Lambros mug no. 14. After Sale Drouot 1912, pl. 5,14.

below, facing right as well, drawn in outline with hatched bodies. A chevron column connects the base-line with the mouth of the horse. The two lateral panels of the metopal zone are decorated with a chequered lozenge in a hatched border; six-pointed stars fill the corners of the panels. The triglyphs separating the three panels consist of vertical single steep zigzag (on both sides of the central panel) and superimposed horizontal zigzags, separated and bordered by vertical zones of three horizontal lines. To the sides of the handle the lateral panels are bordered by simpler triglyphs of cross-hatched columns in triple outline. The zone of triple vertical lines bordering the handle is elongated to meet the lip above and the lower attachment of the handle below. The handle is decorated, between framing lines to the edges, with a central hatched column between two zones of two vertical lines and two zones of round tangential blobs. On the part of the handle facing the interior of the vase a large eight-pointed star is painted below three horizontal strokes. The strut is painted black. The interior of the mouth is decorated with three horizontal lines.

Bibliography: Sale Drouot 1912, 5 pl. 4,12; de Mot 1913, 20; Schweitzer 1918, 139 pl. 5,3; Pfuhl 1923 (I), 71; Shoe 1932, 64 with n. 4; Kahane 1940, 475; CVA Brussels (1949) (3) III H b, pl. 2,9a-b; Coldstream 1968, 42 cat. 11; Rombos 1988, 420 cat. 65; CVA Edinburgh (1989) (1) 2.

### 13. Tankard

Present whereabouts unknown.

Measurements: height 18 (?).

Condition: complete (?).

Fabric: Attic clay (?).

Shape: like no. 11.

Decoration: probably black glaze. It is to be gathered from the description in the auction catalogue, that the decoration was more or less identical with no. 11 (Fig. 29), consisting of a metopal scheme on the upper part of the vase, with two lateral bird panels and a central panel with a swastika.

Bibliography: Sale Drouot 1912, 5.

### 14. Mug (Fig. 34)

Present whereabouts unknown.

Measurements: height 11 (?).

Condition: complete (?); handle probably broken off and mended. Surface rather worn.

Fabric: Attic clay (?).

Shape: flat base, convex lower body, above which a carination – at approximately two-fifth of its height – marks the transition to a concave beaker, widening towards the upper part. Max. diameter at the mouth. High handle, probably oval in section.

Decoration: black glaze (?). Black band around the base, above which four horizontal lines and a zone of cross-hatched triangles in double outline. The neck consists of a high metopal zone between two minor zones of three horizontal lines. The central panel depicts a grazing stag in silhouette facing right, a chevron column between its legs and two stacked chevrons to the left. The two lateral panels consist of superimposed horizontal zigzags. The triglyphs separating the panels are formed by a hatched column in double outline. The zone right below the rim consists of dotted (?) triangles in double outline. The interior is unpainted.

Bibliography: Sale Drouot 1912, 5 pl. 5,14; Schweitzer 1918, 139, 140 pl. 6,4; Pfuhl 1923 (I), 71; Shoe 1932, 64 with n. 4; Himmelmann-Wildschütz 1961, 2, 13, 19-20 with n. 22.

### 15. Skyphos (Fig. 35)

Present whereabouts unknown.

Measurements: diameter 14 (?).

Condition: fair; reassembled from a few fragments, parts of mouth missing, rim chipped; decoration partly worn off.

Fabric: Attic clay (?).

Shape: flat 'string-cut' base; shallow straight/slightly convex basin and high convex wall, gentle transition to vertical/oblique mouth with plain rim, thickened on the inside; horizontal strap handles with off-set ends.

Decoration: brown to black glaze. High solid black band around the base. Upper body/handle zone: high metopal zone between two minor zones of three horizontal lines. Central panel consists of a single motif of compass-drawn tangential dotted circles, shaping a pentagon with one compass-drawn dotted circle in the middle. The two lateral panels consist each of a bird, drawn in outline with hatched wing, facing towards the centre; dotted rosettes fill the space to the sides of their necks. The three panels are separated by triglyphs of vertical zigzag



*Fig. 35. Lambros skyphos no. 15. After Sale Drouot 1912, pl. 5,15.*



*Fig. 36. Lambros skyphos no. 16. After Sale Drouot 1912, pl. 5,16.*



*Fig. 37. Lambros skyphos no. 17. After Sale Drouot 1912, pl. 5,17.*



in triple outline; the lateral panels are separated from the handles by simple triglyphs of three vertical lines. Mouth: line of compass-drawn dotted circles, above which on the rim a single line. The inside of the vase is painted solid black; on the inner lip a double horizontal line, above which six groups of 14 vertical strokes. Handles: vertical line of tangential elongated blobs, framed by a single black line following the contour of the handle.

Bibliography: Sale Drouot 1912, 6 pl. 5,15; Schweitzer 1918, 139-140 pl. 6,7; Pfuhl 1923 (I), 71; Kahane 1940, 475; Corbett 1954, 66-67 with n. 2; Marwitz 1959, 74; Himmelmann-Wildschütz 1961,2, 10; Backe-Forsberg and Risberg 1993, 35.

*16. Skyphos (Fig. 36)*

Present whereabouts unknown<sup>18</sup>.

Measurements: diameter 13 (?).

Condition: fair; reassembled from a few fragments; decoration partly worn.

Fabric: Attic clay (?).

Shape: flat 'string-cut' base; body with deep straight-sided and convex wall, gentle transition to vertical mouth with plain rim, thickened on the inside; horizontal strap handles with off-set ends.

Decoration: brown to black glaze. High solid black band around the base. Upper body/handle zone: high metopal zone between two minor zones of three horizontal lines below and two above. The central panel consists of a hatched quatrefoil; the room between the leaves is filled with four equilateral triangles in double and triple outline. The lateral panels consist each of a bird in outline with hatched body, facing towards the centre; as filling ornaments, dotted rosettes, small swastikas and a dotted line are used. The triglyphs separating and bordering the three panels consist of simple groups of three vertical lines. Mouth: row of elongated dots and a single horizontal line above. Rim: single line. The inside of the vase is painted solid black; on the inner lip a single horizontal line. Handles: broad single line with a dotted line above, framed by a single black line following the contour of the handle.

Bibliography: Sale Drouot 1912, 6 pl. 5,16; Schweitzer 1918, 139 pl. 6,1; Pfuhl 1923 (I), 71; Kahane 1940, 475; Corbett 1954, 66-67 with n. 2; Marwitz 1959, 74; Himmelmann-Wildschütz 1961,2, 10.

*17. Skyphos (Fig. 37)*

Present whereabouts unknown.

Measurements: diameter 13 (?).

Condition: fair; reassembled from a few fragments, part of mouth missing, rim chipped; decoration partly worn off.

Fabric: Attic clay (?).

Shape: flat 'string-cut' base; body with steep, straight basin and convex wall, gentle transition to a slightly concave mouth with plain rim, thickened on the inside; horizontal round handles.

Decoration: brown-black paint. High solid black band around the base. Upper body/handle zone: high metopal zone with four panels on each side of the vessel, between two single horizontal lines. The two central panels have a bird in outline with hatched body, facing

towards the centre; single small eight-pointed stars fill the space in these panels. The two narrow lateral panels consist of a dotted rosette with a dotted vertical line below. The central triglyph is cross-hatched and painted in double (right) and triple (left) outline. The other triglyphs, separating and bordering the panels, are simple triple vertical lines, in one case, to the right, only a double vertical line. Mouth: row of vertical strokes or elongated dots, between two single horizontal lines. The inside of the vase is painted solid black; on the inner lip two single horizontal lines. Handles: double horizontal line on the back.

Bibliography: Sale Drouot 1912, 6 pl. 5,17; Schweitzer 1918, 139 pl. 6,3; Pfuhl 1923 (I), 71; Kahane 1940, 475; Corbett 1954, 66-67 with n. 2; Marwitz 1959, 73; Himmelmann-Wildschütz 1961,2, 10; Backe-Forsberg and Risberg 1993, 35-37.

*18. Skyphos (Fig. 38)*

Present whereabouts unknown.

Measurements: diameter 10 (?).

Condition: fair; almost intact (?), part of mouth missing, rim chipped.

Fabric: Attic clay (?).

Shape: flat 'string-cut' base; body with shallow, straight basin and deep convex wall, gentle transition to high vertical mouth with plain rim, thickened on the inside; horizontal round handles.

Decoration: brown-black glaze. High solid black band around the base. Upper body/handle zone: high metopal zone with four panels on each side of the vessel, between two single horizontal lines. The two central panels consist each of a bird in silhouette with body in double outline, facing towards the centre; the eyes of the birds are perhaps reserved; single small eight-pointed stars, as well as chevron columns in front of the birds, fill the space in these panels. The two narrow lateral panels consist of a small eight-pointed star. The broad central triglyph is cross-hatched and painted in triple outline. The other triglyphs, separating the other panels, are simple triple vertical lines, the ones between the lateral panels and the handles consist of only a double vertical line. Mouth: vertical zone of tangential dotted circles, between two single horizontal lines. Rim: single line on the edge. The inside of the vase is painted solid black; on the inner lip two single horizontal lines. Handles: double horizontal line on the back.

Bibliography: Sale Drouot 1912, 6 pl. 5,18; Schweitzer 1918, 139 pl. 6,6; Pfuhl 1923 (I), 71; Kahane 1940, 475; Corbett 1954, 66-67 with n. 2; Marwitz 1959, 73; Himmelmann-Wildschütz 1961,2, 10; Backe-Forsberg and Risberg 1993, 36-37.

*19a. Pyxis (Fig. 39)*

Present whereabouts unknown.

Measurements: height (including lid) 17.5 (?).

<sup>18</sup> The piece has one almost exact parallel in the Robinson Collection, which is said to have been found together with a Phoenician seal in a "Geometric tomb southeast of Athens", Robinson 1949, 310-311 pl. 40,7a. Both sides of this piece are said to be identical.



Fig. 38. *Lambros skyphos* no. 18. After Sale Drouot 1912, pl. 5, 18.

Condition: complete; reassembled from a few large fragments.

Fabric: Attic clay (?).

Shape: flat base; low, convex body.

Decoration: black glaze (?). High metopal zone on the middle of the body, framed by two minor zones, each consisting of a hatched zone between double horizontal lines. The metopal zone consists of 12 (or perhaps 14) panels, decorated with two different motifs. First, a chequered lozenge in a hatched border with four dots filling the corners of these panels. Secondly, a bird in outline with hatched wing facing right. To the left a floating column of chevrons or two stacked zigzags. The triglyphs separating the panels consist of a cross-hatched column in triple outline. At least in one case the triglyph consists of three vertical lines only.

Bibliography: Sale Drouot 1912, 6 pl. 3, 19; Schweitzer 1918, 139 pl. 4, 3; Corbett 1954, 67 with n. 4; Bohen 1988, 128, 145, cat. 6.

#### 19b. *Pyxis lid* (Fig. 39)

Present whereabouts unknown.

Measurements: unknown.

Condition: complete; horse broken off and mended. Decoration on a few places worn.

Fabric: Attic clay (?).

Shape: convex lid, with a modelled clay horse on top, used as handle; four legs and tail touch the lid.

Decoration: black glaze (?). Row of dogtooth, between two hatched zones, separated from each other by double horizontal lines. The inner hatched zone is separated from the black centre of the lid by another double horizontal line. The body of the horse is painted black, with some reserved areas. Its sides are reserved and painted with vertical strokes. The lower part of its neck is reserved to the sides and the front, and is painted with round tangential blobs between two horizontal lines. The back from head to tail is reserved and painted with a (cross-?) hatched zone between two lines. It is not clear from the photo in the auction catalogue, whether the eyes were indicated.

Bibliography: see 19a.

#### 20. *Spouted sieve vessel* (Figs. 40-44)

Brussels, Musées Royaux d'Art et d'Histoire (Cinquantenaire) Inv. A 1943.

Measurements: height 8.5; diameter 15.5.

Condition: fair; one handle missing, one broken, rim chipped; decoration is worn off in a few places.

Fabric: yellowish brown Attic clay.

Shape: skyphoid shape. Flat bottom with low ring-base; deep, slightly convex basin and wall with shallow vertical mouldings (gadrooning), leaving plastic leaf-shaped ribs between; high, oblique concave mouth with splaying rim; horizontal round handles. Short, broad spout fixed at a right angle to the handles diagonally below the rim at one side, which we may call the front. Top consists of a shallow, slightly concave sieve, attached to mouth and rim; small pierced holes are arranged in three concentric circles; large circular opening in the centre.

Decoration: brown to black glaze. Base: dotted line and horizontal band. Body/handle zone: between two minor zones of two vertical horizontal lines, a high zone of cross-hatched tongues in triple and dotted outline, painted on the plastic leaf-shaped ribs; the shallow vertical mouldings between are decorated with steep vertical zigzags on the back and tangential dotted circles on the front. Triglyphs, consisting of a dotted line, two thin and one thick vertical line, separate this decorative zone from the handles; the dotted line on the front, left, ends in its upperpart in a dotted rosette; on the back, left, the triglyph only consists of the dotted and the thick line. Between and below the handles two further triglyphs are painted, consisting of a triple vertical line between two rows of horizontal strokes or elongated dots. The handles are decorated with a line of vertical strokes or elongated dots between two horizontal lines. Mouth: wide hatched zigzag between two single horizontal lines; above the handles large rectangles of solid paint (zigzag originally being continued beyond). Spout: zone of vertical strokes or elongated dots, between a triple line below and a double line above. Interior of the spout in solid black. Top: zone of tangential elongated blobs around the edge; shallow sieve in solid black.

Bibliography: Sale Drouot 1912, 6 pl. 4, 20; de Mot 1913, 20; Schweitzer 1918, pl. 5, 1; Pfuhl 1923 (I), 71; Lushey 1939, 84 with note 485; CVA Brussels (1949) (3) III H b, pl. 2, 8; CVA München (1952) (3) 20; Himmelmann-Wildschütz 1961, 2, 10.

#### 21. *Pomegranate* (Fig. 45)

Present whereabouts unknown<sup>19</sup>.

Measurements: height 12 (?).

Condition: fair; perhaps one or two of the petals broken off.

Fabric: Attic clay (?).

Shape: globular body with (probably five) shallow vertical mouldings; short, thick stem; body ended originally in a corolla of about six petals. Stem probably provided with hole for suspension.

<sup>19</sup> The piece erroneously was said to be in Berlin (West) by N. Kourou (1987, 102). We thank the author for bringing this correction to our notice by letter of 26-5-1993.



*Fig. 39. Lambros pyxis no. 19. After Sale Drouot 1912, pl. 3,19.*



*Fig. 40. Lambros spouted sieve vessel no. 20. Brussels, Musées Royaux d'Art et d'Histoire Inv. A.1943. (Photo A.C.L.).*



*Fig. 41. Lambros spouted sieve vessel no. 20. Brussels, Musées Royaux d'Art et d'Histoire Inv. A.1943. (Photo A.C.L.).*





Fig. 42. Lambros spouted sieve vessel no. 20. Brussels, Musées Royaux d'Art et d'Histoire Inv. A.1943. (Photo A.C.L.).



Fig. 43. Lambros spouted sieve vessel no. 20. Brussels, Musées Royaux d'Art et d'Histoire Inv. A.1943. (Photo A.C.L.).



Fig. 44. Lambros spouted sieve vessel no. 20, top. Brussels, Musées Royaux d'Art et d'Histoire Inv. A.1943. (Photo A.C.L.).



Fig. 45. Lambros pomegranate no. 21. After Sale Drouot 1912, pl. 3,21.

Decoration: black glaze (?). Corolla painted black on the outside, separated from the body by three (or four?) horizontal lines. Four horizontal zones on body, separated from one another by zones of three horizontal lines. Rather narrow zone with hanging cross-hatched equilateral triangles, separated by single dots. Metopal zone with cross-hatched lozenges in a hatched border; four small eight-pointed stars fill the corners of the panels. These panels are framed by triglyphs, consisting of a cross-hatched column in triple outline. The triglyphs seem to correspond to the shallow vertical mouldings mentioned above. Metopal zone with panels of one, two and three inscribed and cross-hatched equilateral triangles, separated by single dots. The panels are separated by triglyphs consisting of three vertical lines. The upper zone of the body shows a row of birds facing right, probably with hatched bodies. It remains unclear whether the stem is painted black or whether it is decorated with two horizontal bands.

Bibliography: Sale Drouot 1912, 6 pl. 3,21; Schweitzer 1918, 139 pl. 4,2; Kourou 1987, 102-103 table 1,2.

#### THE DISPERSION OF THE LAMBROS GROUP

Four pieces (nos. 3, 4, 12 and 20) were bought by museums directly on the 1912 sale. Others went through the hands of Parisian art dealers first. Feuardent sold the pitcher no. 1 to the Staatliche Kunstsammlungen, Kassel, in 1929, Platt sold the lekythos no. 8 to the Scheurleer Museum in The Hague and the small lekythos no. 9 – with C. W. Lunsingh Scheurleer as intermediary – to the collection of the Archaeological Institute of the University of Utrecht in 1927. Oinochoe no. 5 was sold again by Drouot (Paris) in 1921, as part of the confiscated Hirsch Collection, and was then acquired by the Louvre. Oinochoe no. 2 was sold in 1953, already without lid, by Münzen und Medaillen in Basle to the Antikenmuseum. In 1934, lekythos no. 8 and the collection of the privately owned Scheurleer Museum went to the Allard Pierson Museum of the University of Amsterdam.

Unfortunately we were not able to trace all the pieces of the group in public collections. One has to conclude that they are kept either in private hands or in a museum which has not fully published its collection<sup>20</sup>. The fact that the lids of pitcher no. 1 (Fig. 3) and the giant oinochoe no. 2 (Fig. 6) have become dissolved from the vases, is deplorable.

#### A GRAVE GROUP

In 1969 B. Schweitzer stated that the oinochoe no. 5 (Figs. 15-17), now in the Louvre, comes from the

Kerameikos<sup>21</sup>. The same had been held by R. Tölle five years earlier<sup>22</sup>. A provenance from the Kerameikos necropolis is not unlikely for the whole Lambros group, but must remain under question. Nevertheless, some good arguments can be brought forward to identify the Lambros Group with an Attic grave inventory.

Not only did the auction catalogue state explicitly that the group of pottery was found together, but it could be shown also that the group, with one exception, is rather homogeneous in date and in composition.

#### CHRONOLOGY

Regarding the chronological coherence of the group, some proposals were made in the past by N. Himmelmann-Wildschütz, who considered the pitcher no. 1 (Figs. 1-4), the giant oinochoe no. 2 (Figs. 5-6) and the lekythos no. 8 (Figs. 20-22) to be slightly older than the other vases<sup>23</sup>: they fall into Coldstream's LG Ib phase. Other pieces, like the pitcher no. 3 (Figs. 7-11), find their closest parallels in the works and workshops of the LG Iia period. As already suggested, the small Proto-Attic mug no. 14 (Fig. 34) should be placed on the other end of the chronological scale, dating about 700 B.C. This wide chronological range deserves further evaluation.

Two explanations concerning the problematic nature of grave-groups of mixed chronological character were discussed by H. Marwitz. He subsumed them as "*Gleichzeitigkeit des Ungleichzeitigen*" i.e. the problem of overlapping pottery styles and the "*Hausrat aus Großväterzeit*" or pottery functioning as heirlooms<sup>24</sup>. The latter explanation was probably implied by N. Himmelmann-Wildschütz, when he stated that the occurrence of objects of different chronology within a single

<sup>20</sup> None of the missing pieces are amongst the unpublished holding in the British Museum. We would like to thank J. N. Coldstream for providing us with this information in his letter of 11-6-1993. Also the Geometric collection of the Rijksmuseum van Oudheden in Leiden does not hold any of these vases, as L. J. Mol, assistant-keeper of the Greek and Roman Department, kindly informs us.

<sup>21</sup> Schweitzer 1969, to pl. 58. The remark of P. Kahane, who considered the group as the contents of a grave, "*Grabzusammenhang*", may be seen in the same line of postulation, Kahane 1940, 475.

<sup>22</sup> Tölle 1964, 88.

<sup>23</sup> Himmelmann-Wildschütz 1961, 19-20 with n. 22.

<sup>24</sup> Marwitz 1959, 58. See also Morris 1987, 15-17, on both the temporal and the social impact on the problem of overlapping pottery styles.



Fig. 46. Cypriot Bichrome Red I juglet. Amsterdam, T. N. Zintilis Collection, Allard Pierson Museum Inv. Z. 173 (Photo M. Bootsman, see n. 127).



Fig. 47. Cypriot Black-on-Red II (?) sieve vessel. Amsterdam, T. N. Zintilis Collection, Allard Pierson Museum Inv. Z. 605 (Photo M. Bootsman, see n. 73).



Fig. 48. Cypriot Black-on-Red II (?) sieve vessel, loose strainer top. Amsterdam, T. N. Zintilis Collection, Allard Pierson Museum Inv. Z. 605 (Photo M. Bootsman).



Attic Geometric grave does not necessarily mean a disturbance of the grave-context<sup>25</sup>. However, in the case of the Lambros Group, the chronology of the pottery is so consistently within the LG 1b -LG IIA period, that the Proto-Attic mug no. 14 (*Fig. 34*) is clearly set apart. The heirloom explanation would then lead to an embarrassing and unsatisfying conclusion: in this case the owner of the Lambros group would have died shortly after 700 B.C., and would have been buried with a complete set of pottery – which he inherited from his (grand-) father or acquired personally in the earlier years of his life – and a small mug of more recent date. This seems to be most improbable. Marwitz' first explanation of graves of mixed chronological character, the overlap in pottery styles, does not seem to fit the reality of the Lambros Group, given the rather wide range of time, about 35 to 50 years. Thus, one may conclude that the Proto-Attic mug is intrusive. This consideration is strengthened by the impression, provided by the photographs, that the surface of this Proto-Attic mug (no. 14; *Fig. 34*) is much more worn and differently than the other vases of the Lambros Group. Considering the fact that the group comes from a clandestine dig, it is not unlikely that the grave-robbers were unable to discern between the contents of the 'Lambros' grave and an adjoining tomb or a sporadic find of a later date. The entire group, including the Proto-Attic mug might, consequently, have come on the market as one closed find.

#### COMPOSITION

The original composition of the Lambros Group probably consisted of 20 vases. They can be arranged according to their function:

- two giant jugs: giant oinochoe (no. 1), pitcher (no. 2).
- two large jugs: pitchers (nos. 3, 4).
- four jugs: oinochoai (nos. 5-7), lekythos (no. 8).
- two juglets: oinochoe (no. 10), small lekythos (no. 9).
- four drinking vessels<sup>26</sup>: tankards (nos. 11-13), skyphoi (nos. 15-18).
- one storage vessel<sup>27</sup>: pyxis (no. 19).
- two others: spouted sieve vessel (no. 20), pomegranate (no. 21).

Within this group some pairs or sets may be recognized. Firstly, the two giant jugs nos. 1 and 2 (*Figs. 1-6*) were made by the Lambros Workshop, and may be considered a functional pair, having clear

connotation of status markers<sup>28</sup>. Secondly, the lekythos no. 8 (*Figs. 20-22*) and the oil-bottle no. 9 (*Figs. 23-27*) share the neck-ridge as a binding element, which is so rare in the contemporary Attic pottery repertoire, that they probably were a pair in antiquity already. As a third set, one may consider the four bird-metope skyphoi nos. 15, 16, 17 and 18 (*Figs. 35-38*)<sup>29</sup>. Apart from this, we encounter an ensemble of four closed pouring vessels (jugs) of *orientalizing* shape, combined with four open drinking vessels (skyphoi) of *Greek* shape.

Amongst the 20 vases of the Lambros Group at least five individual painters, groups and workshops have been distinguished: the Hirschfeld Workshop (tankard no. 12, *Figs. 30-33*)<sup>30</sup>, the Rattle Group (pitcher no. 3, *Figs. 7-11*)<sup>31</sup>, the Concentric Circle Group (oinochoe no. 7, *Fig. 19*, CCG 2), the Workshop of Athens 725 (skyphoi nos. 17-18, *Figs. 37-38*)<sup>32</sup> and the Lambros Workshop (pitcher and giant oinochoe no. 1, 2, *Figs. 1-6*).

There were other divisions made before. B. Schweitzer discerned two subgroups, the first, enclosing vessels nos. 1, 2, 6(?), 11-12, 14-19 and 21, and the second, enclosing vessels nos. 3-10. The tankard no. 13, which was not illustrated in the 1912 auction catalogue, and the sieve vessel no. 20 he left undiscussed<sup>33</sup>. Apparently, Schweitzer intended this division to be a chronological one, which he based on stylistic criteria.

A different proposal was forwarded by N. Himmelmann-Wildschütz, who considered eight vases of the Lambros Group (nos. 6, 7?, 11, 15-18 and 20) to be part of the so-called "*Vogelmetopen-Gruppe*"<sup>34</sup>. He made not quite clear, whether this should be due to productional or stylistic criteria. However, the ample amount of vases, allowing to distinguish a particular Bird-metope Group,

<sup>25</sup> Himmelmann-Wildschütz 1961,2, 13-14.

<sup>26</sup> In this connection it is to be remembered, that Greek skyphoi might also have been used for eating purposes; Howe 1958, 49-50 with n. 24; Coldstream 1979, 255 with n. 2.

<sup>27</sup> Bohn 1988, 5-7.

<sup>28</sup> Coldstream 1968, 34 and pl. 7d-e. Also in Trachones, Geroulanos 1973, 52.

<sup>29</sup> The occurrence of four different skyphoi of the same general shape in one grave is not unknown in contemporary Attica, as the example of grave A 39 in Trachones with four high-rimmed skyphoi proofs. Geroulanos 1973, pl. 5,1.

<sup>30</sup> Coldstream 1968, 42.

<sup>31</sup> Rombos 1988, 480.

<sup>32</sup> Backe-Forsberg and Risberg 1993, 37.

<sup>33</sup> Schweitzer 1918, 139, 142.

<sup>34</sup> Himmelmann-Wildschütz 1961,2, 9-11.

reflects the popularity of this pictorial feature during this period. But even within this group, various workshops may be recognized, as shown by the recent publication of Y. Backe-Forsberg and Ch. Risberg (1993).

The number of vases of this alleged group is quite unusual for the inventory of an Attic grave. Contemporary grave groups, listed by G. Krause in his *Zeitstufe* 8 and 9a, which correspond with Coldstream's periods LG Ia – LG IIa, clearly show that a grave seldom yields more than six vases<sup>35</sup>. However, graves rich in pottery did occur. Agora Grave 17 for example, dating to the LG Ia period, contained 22 vases, as well as some gold adornments<sup>36</sup>. Another rich group, Kerameikos Grave 50, dating early in the LG Ib period, is comprised of 15 vases, many of which are unique and rare in the Attic repertoire<sup>37</sup>. With them, a gold band and an iron knife were found.

For these reasons we consider the Lambros Group being the contents of a rich Attic grave, possibly from the Kerameikos, rather than an assemblage of various grave groups. Even with regard to the gender of the person buried with the grave group, some clues may be mentioned. Since horse-pyrides (no. 19; *Fig. 39*) most often occur as grave-gifts in female burials, as B. Bohen was able to show, it is not unlikely, that the Lambros Group belonged to the grave of a rich (Athenian) lady<sup>38</sup>. Only recently J. Whitley forwarded his observation, that throughout the whole sequence of Attic (Proto-) Geometric graves “(...) *it is always graves of women that are the most richly furnished* (...)”<sup>39</sup>. This even holds for the Late Geometric period.

The date of the 20 vases of the Lambros Group ranges between the LG Ib and LG IIa period. Consequently, the actual burial would have occurred somewhere in the LG IIa period, around 730-720 B.C. in Coldstream's chronology<sup>40</sup>.

#### THE EASTERN CONNECTION OF THE LAMBROS GROUP

It may seem coincidental that in this rich group of 20 vases many formal and decorative elements come together, which can be traced back to the East and mainly to Cyprus. Describing and explaining this phenomenon poses the aim of the present study. In the following paragraphs the oriental influences on the individual vases of the Lambros Group are discussed.

#### SHAPES WITH ORIENTAL AFFINITIES OR ORIGIN

##### *Oinochoai/jugs* (nos. 5-7)

“Diese Bevorzugung der Kannenform mag an die letzten Zeiten der protogeometrischen Periode erinnern oder an den äußersten Osten, wo sich ja seit dem Ende der mykenischen Kultur der Schutt der im Verlauf des lebendigeren künstlerischen Entwicklungsprozesses des Westens ausgeschiedenen Elemente staut.”<sup>41</sup>

The shape of the *trefoil-mouth jug* – or *oinochoe*, as it is called elsewhere – of any size, is mainly characterized by the name-giving, softly undulating pinched mouth, a narrow neck of either cylindrical, concave conical or inverted conical contour, a globular to ovoid, piriform or even biconical body, a flat, ring or pedestal base and a single or double rolled loop handle from shoulder to rim.

The *trefoil-mouth jug* was known as early as the Late Bronze Age in the Philistine and Canaanite repertoires of the East<sup>42</sup>. It is paralleled in the Mycenaean IIIC:1 *oinochoe* of the Aegean and the Greek homeland. In Cyprus this general shape appears initially in Proto-White Painted and White Painted I wares of CG I (1050-950 B.C.), inherited from the Late Cypriote III pottery and derivative from Mycenaean IIIC:1 types<sup>43</sup>. Since the CG II period (950-850 B.C.) several varieties of indigenous Cypriot shapes emerged from the oriental prototype. Clearly distinguishable from the Cypriot shapes, however, are *Phoenician* derivations both of the Levantine metropoleis and overseas settlements or regions, which descend from the same oriental predecessors<sup>44</sup>. By such, in both Cypriot and Phoenician repertoires we encounter a bewildering variety of shapes – and decoration, as shown

<sup>35</sup> Krause 1975, Tab. 29, Beilage B Tabelle 2. Beilage C. See also Morris 1987, 141-143.

<sup>36</sup> Young 1939, 76-87; Coldstream 1968, 46.

<sup>37</sup> Kübler 1954, 243-245; Bohen 1988, 9 pl. 36,1.

<sup>38</sup> Bohen 1988, 8-10.

<sup>39</sup> Whitley 1991, 179, 183. The MG II example of the female burial in the so-called Isis-Grave at Eleusis, with 69 small vases, is too well-known to be recounted in this context: Snodgrass 1971, 332-352; Coldstream 1977, 78-80.

<sup>40</sup> See also Neeft 1987, 380.

<sup>41</sup> Schweitzer 1918, 143, about the jugs of “mannigfacher Typus” V 2 and VI 2 (= our nos. 7 and 10).

<sup>42</sup> e.g. Dothan 1982, 191, a trefoil-mouth juglet from Azor, fig. 58, 2 pl. 94, with references.

<sup>43</sup> Gjerstad 1948, 282 with n. 12; 284 fig. 4,8-14. Gjerstad 1960, 117-118 fig. 10.

<sup>44</sup> For the Phoenician trefoil mouth jugs from Cyprus: Red Slip I (III) – II (IV) Ware, dating CG III – CA I (850-600 B.C.) (Gjerstad 1948, figs. 27, 43.); Bikai 1987, 29-34 pls. 14-16 nos. 349-409.



Fig. 49. Attic LG hydria from Athens, Agora, Well P, P 21434. After Brann 1961, pl. 15, P8.



Fig. 51. Bronze bowl from Olympia, drawing of detail. After Markoe 1985, 316.

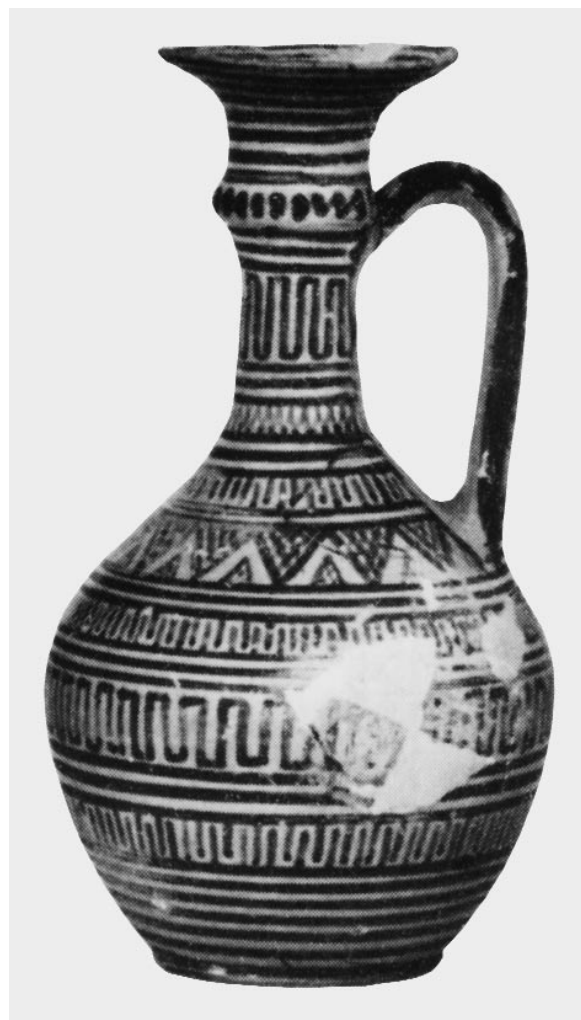


Fig. 50. Attic lekythos from Trachones Grave A 23, Tr. 313. After Geroulanos 1973, pl. 30,2.

subsequently. Yet in most cases the ultimate origin of each vessel can be traced <sup>45</sup>.

In Attica broad-based *oinochoai* suddenly reappear in the pottery repertoire of EG time, during the second quarter of the ninth century<sup>46</sup>. Since comparable shapes used during the intermediate period are unknown, this kind of re-introduction could be explained by the increasing knowledge of eastern models – and Cypriot in particular<sup>47</sup>. In the LG period, this Cypriot connection was taken up again and strengthened by the combination of the orientalizing shape – by then already well established in the Attic pottery repertoire – and new decorative elements and schemes of eastern origin, being discussed hereafter.

The shapes of jugs nos. 5-7 (Figs. 15-19) confirm this picture by combining orientalizing elements to various degrees. They *recall* oriental shapes rather than *copying* them, each merging into an individual Greek shape, of which the contours are clear and sharp. The necks are cylindrical, with sharp transitions to both the bodies and to the regularly pinched mouths. The handles are shaped in accordance with their oriental forerunners, which is strikingly seen in the double-rolled handle of no. 6 (Fig. 18). Unlike Cypriot and Phoenician jugs men-

<sup>45</sup> Cf. Gjerstad 1948, 296 with n. 8.

<sup>46</sup> In Coldstream's chronology, Coldstream 1968, 14 pl. 2d.

<sup>47</sup> This gap could only be filled by the ovoid *oinochoai* of the Proto-Geometric and EG I period.



tioned in the previous paragraphs, the jugs nos. 5-7 of the Lambros Group have flat bases without turned rings or feet. The ovoid or globular body is cut-off to produce a wide flat base (Figs. 15-19). This flat base may be considered an intended typological element rather than a solution convenient to a potter, who might have been tired of turning a decent foot. Originating in Cyprus, this very feature is restricted to a type of 'votive-juglet' of the Cypriot repertoire only (see below, juglet no. 9). The jugs nos. 5 and 6 differ from no. 7 merely by the shapes of their bodies. Whereas the former two (Figs. 15-18) have wide, slightly depressed ovoid bodies with rounded transitions to their shoulders, only the latter (Fig. 19) has a true globular body. This globular body, known as a characteristic feature of the Phoenician 'spherical' and 'ring base neck-ridge jugs', is unique to the Greek oinochoe – and to the Concentric Circle Group in particular, among which jug no. 7 figures<sup>48</sup>.

The closest eastern parallels for the shape of these jugs may be found in a Cypriot Bichrome Red I (750-600) jug from Amathus<sup>49</sup> and a Phoenician Bichrome counterpart from the cemetery of Khirbet Silm<sup>50</sup>. Phoenician Painted and Bichrome Ware examples of this type of trefoil-mouth jug were obviously restricted to the Phoenician homeland repertoire of the ninth century, since still being unparalleled in Cyprus<sup>51</sup> and the West Mediterranean. The cemeteries of Khirbet Silm and Joya yielded some painted examples, showing only slightly varied shapes: either with globular bodies, cylindrical to slightly conical necks with trefoil-mouths and single or twin loop-handles from shoulder to rim, or with globular to ovoid bodies, taller, conical or inverted conical necks, and handles shaped alike<sup>52</sup>.

In Cyprus and in the West *trefoil-mouth jugs* appeared in the Phoenician Red Slip Ware only. Here, two types of trefoil-mouth jugs are found. Firstly, a type with ovoid body, wide footed to pedestal base, long conical neck, elsewhere called *pitcher*<sup>53</sup> and, secondly, a type with globular to piriform body, base ring and inverted conical neck<sup>54</sup>. Both are known of varying proportions. Although E. Gjerstad was conscious of the 'Syro-Palestinian' influence on certain Cypriot pottery products<sup>55</sup>, he treated these jugs as Cypriot Red Slip I-II Ware. But, as a matter of fact, the trefoil-mouth jug was hardly ever part of standard Cypriot ceramic repertoire, and was obviously seldom favoured by Cypriot potters<sup>56</sup>.

Concluding, one would not consider the shape of the trefoil-mouth jug to be foreign to Greek

tradition. But it has become obvious, to which measure the oinochoe was influenced and inspired by the Phoenician and Cypriot pottery repertoire or the intrusive and increasing knowledge of oriental traditions, respectively. Thus, the oinochoai of the Lambros-group may be called true exponents of an orientaling type of vessel<sup>57</sup>.

#### *Lekythos* (no. 8)

The general shape of the jugs of the Lambros Group may be compared to the Phoenician Red Slip Ware trefoil-mouth jug. In the case of *lekythos* no. 8 (Figs. 20-22) however, the sharp contours of its ovoid to conical body with flat shoulder<sup>58</sup>, raised on a narrow footed base, and the loop handle, were inspired by jugs as e.g. Joya<sup>59</sup> or Amathus T. 266/74-11, 321/67 and 381/1<sup>60</sup>. Yet, the narrow cylindrical neck with neck-ridge and plain mouth with flaring rim was derived from the Phoenician 'spherical' and 'ring base neck-ridge jug' of Bichrome, Painted or Red Slip Wares. Thus, the combination of these two parts, body and neck, is definitely unknown in the Phoenician

<sup>48</sup> With regard to the shape, all other examples of the Concentric Circle Group display tendencies towards bodies of a gently rounded, depressed ovoid form, without having repercussions for the shape of their necks, which have only slightly varied lengths, thus producing slightly different proportions.

<sup>49</sup> T. 7iii/16, Gjerstad 1935, 33 pl. 129,1; Gjerstad 1948, fig. 41,13. The 3rd burial stratum was dated by Birmingham (1963, 27, 41) to mid-late eighth century B.C.

<sup>50</sup> Chapman 1972, 88. 157-158. fig. 10 no. 15.

<sup>51</sup> For bearing a notion of the above mentioned examples, cf. another single Phoenician Bichrome jug from Episkopi T. 4/31, Bikai 1987, 28 pl. 11 no. 339, and, perhaps, no. 340, from Kition.

<sup>52</sup> Chapman 1972, Black Painted and Bichrome Ware: 86-88. 157-158 fig. 10 nos. 15-17; p. 171 fig. 11 nos. 21, 23-24; Red Slip Ware: 132-136, 166-168 figs. 26-27.

<sup>53</sup> From Amathus tomb 7/15 and 13/39; Gjerstad 1948, figs. 27,4-5. Of unknown provenance, now in the British Museum, fig. 43,10-11. For Black Slip IV Ware examples, see fig. 43,16.

<sup>54</sup> From Amathus tomb 13/38; Gjerstad 1948, fig. 27,6. Of unknown provenance, now in the Metropolitan Museum of Art, fig. 43,13.

<sup>55</sup> Reflected by his so-called 'red group', Gjerstad 1948, 269-270.

<sup>56</sup> From Cyprus, more Phoenician Red Slip Ware jugs of this type were listed by P. Bikai, who treated them as homeland imports, dating to her 'Salamis' and 'Kition Horizon' (850?-750? resp. 750?-after 700) Bikai 1987, nos. 349-409, 29-34. pls. 14-16.

<sup>57</sup> See n. 123, below.

<sup>58</sup> Earlier, this 'elastic' shape was cited as an example of the influence of metal work on Geometric pottery, *Algemeene Gids* 1937, 123. On the metallic influence on Geometric pottery see also: Young 1939, 215; Coldstream 1983b, 206, as well as the paragraphs on gadrooning, below.

<sup>59</sup> Chapman 1972, 135 fig. 27 no. 261.

<sup>60</sup> Bikai 1987, 30 nos. 353, 355 and 360 pl. 14. ('Salamis Horizon' [850?-750?]).

pottery repertoire. By combination of these parts, the Greek potter blended elements of various eastern traditions into a completely unique shape, to the effect, that this jug became even more *orientalizing* than the originals themselves. Apparently, he consciously avoided the conical neck with trefoil-mouth, since it was often (enough?) used for other Greek jugs (oinochoai), and so he chose the one with the neck-ridge instead. The loop handle is attached to the neck-ridge. The same amalgamy is encountered in Cypriot pottery as well, where potters were tempted to create most unusual, playful combinations: for a quite similar shape of neck with neck-ridge compare a Cypriot CA I trefoil-mouth (sic!) Bichrome IV jug<sup>61</sup>.

#### *Juglet (no. 9)*

With this juglet (*Figs. 23-27*) the Lambros-group provides one of the purest orientalizing shapes of all, reflecting acquaintance with a particular Cypriot vessel in Greece.<sup>62</sup> Its squat piriform body with a wide flat base, straight shoulder and the narrow cylindrical neck, rounded neck-ridge, concave upper part above, splaying mouth and plain rim recall the Cypriot 'votive juglet', by far the commonest vessel among Cypriot exports. According to E. Gjerstad, it was introduced in the CG III period (850-750) by Black-on-Red I Ware, and occurred in several varieties, continuing in Cyprus during the whole seventh century. This juglet, the most long-lived vessel of the Black-on-Red Ware, experienced a wide distribution into the East and Central Mediterranean. Apart from its shape, the extremely smooth and lustrous polished surface (*Figs. 23-26*) of the Lambros juglet shows a striking dependence on the so-called 'one-handed juglets' of the Black-on-Red I-II wares from Cyprus. Of this vast group of 'votive juglets', the Attic potter apparently chose a particular variety as a model for the Lambros piece no. 9. This may be compared to a variant of Gjerstad's 'Type III', of which Amathus produced a considerable number of examples<sup>63</sup>. It only differs from the Cypriot examples by the off-set handle and the little knob on the shoulder<sup>64</sup>.

#### *Juglet (no. 10)*

The shape of this juglet (*Fig. 28*) is clearly derivative from a Cypriot jug type. The decoration, however, points towards a Levantine origin, being obviously inspired, but yet not paralleled by Black-on-Red I Ware (cf. hereafter). Its comparatively undistorted contours and its combination of a globular base-ring body with a short concave neck and a plain rimmed trefoil-mouth reflect again a true Cypriot blending of Phoenician forerunners. To

these, the actual proportions, as seen in the short concave neck, are foreign. The Phoenician Red Slip trefoil-mouth jug with globular body is very different in its proportions and, more strikingly, has an inverted conical neck<sup>65</sup>. For traditional Cypriot models for this shape one may refer to the following examples. An earlier Bichrome II juglet from Lapithos T. 403/82 with horizontal decoration of red band and black lines<sup>66</sup>, a Black-on-Red I jug with intersecting-circle design from Lapithos T. 410/5<sup>67</sup> and, as a closest parallel, a Black-on-Red II juglet with horizontal black lines and small concentric circles, of unknown provenance<sup>68</sup>.

Jugs usually of larger proportions than the juglet of the Lambros Group, occur since CG II (950-850) in Cypriot repertoire, though later tending to ovoid and biconical shaped bodies.

#### *Sieve vessel/strainer (no. 20)*

Sieve vessels or strainers are not very common in the Attic pottery repertoire. In Greece, as a rule, they seem to be a fairly late innovation. The earliest Attic example, of our knowledge, is now in the

<sup>61</sup> CG III-CA I (850-600): Gjerstad 1948, fig. 35,2 CM B. 663; fig. 42,12 CM B. 2001 (Bichrome Red I); fig. 25,21 CM B. 2004, (Black-on-Red I) jug; cf. an example of Coan LG pottery, Coldstream 1977, 253-254 fig. 82a.

<sup>62</sup> For a more or less related Greek juglet with splayed, funnel-shaped mouth cf. CVA München (1952) (3), pl. 117,7-8.

<sup>63</sup> Cf. for this variety, Amathus: Gjerstad 1935, 34 pl. 12, T. 7iii/54; p. 61-62. pl. 15, T. 9/135, 171; p. 78 pl. 18,4, T. 12/1 (Black-on-Red I); provenance unknown: Gjerstad 1948, fig. 38,9 (Black-on-Red II). Khirbet Silm: Chapman 1972, 144 fig. 31 no. 162; cf. one-handed juglets from Cyprus (CG III-CA I [850-600]): Gjerstad 1948, fig. 19,4 (White Painted III, provenance unknown); fig. 22,10 (Bichrome III, provenance unknown); fig. 22,12 (Bichrome III, Amathus T. 11/64); fig. 25,10 (Black-on-Red I, provenance unknown); fig. 26,8 (Grey and Black Polished I, provenance unknown); Gjerstad 1960, 115-116. Mainland and Cyprus distribution: Birmingham 1963, 36; cf. Vandenabeele 1968, 107-109. On Phoenician infiltration and marketing of unguents on Cos and Rhodes: Coldstream 1969; Coldstream 1972; Coldstream 1977, 67 figs. 20b-c; now also: Jones 1993. Knossos: Coldstream 1984, 129-133 fig. 2 pls. 25-26; Akhziv: Culican 1982, 60-61 figs. 6c-e. 9j. Joya, Khirbet Silm and partly mainland distribution: Chapman 1972, 144, 171 fig. 31 nos. 161-162. This very type of juglet is not by any means of Phoenician origin as it may have been implied from Gjerstad 1960, 115-116 and promoted by e.g. Birmingham 1963, 36 and Coldstream 1977, 67, creating a lasting discussion on origin, provenance and chronology.

<sup>64</sup> The same details occur on a juglet in Cambridge. In addition to the off-set handle and two knobs on its shoulder, its neck is shaped similar to those of the Cypriot Black-on-Red 'votive juglets'. Gardner 1897, 6 cat. 22 pl. 2,22. See also n. 112, below.

<sup>65</sup> cf. Bikai 1987, 31-34 nos. 368-409.

<sup>66</sup> Gjerstad 1948, fig. 16,7. (CG II [950-850]).

<sup>67</sup> Gjerstad 1948, fig. 25,18 (CG III [850-750]).

<sup>68</sup> Gjerstad 1948, fig. 39,1 (CA I [750-600]).

Allard Pierson Museum (Amsterdam), and probably dates early in the LG Ia period<sup>69</sup>. Other examples, more or less comparable to the Lambros piece, are now in Tiryns, London, Vienna, Laon, Munich and Leiden, and date somewhat later, in the LG Ib period<sup>70</sup>. The shapes of the Attic examples are derived from the skyphos. Only the earliest piece, now in Amsterdam, is developed from a *jug* and has a vertical handle, too.

In the East, however, especially in Cyprus, pottery strainers have a much longer tradition. The Attic sieve vessels combine the characteristics of two – probably Cypriot – types of strainers, which served two different purposes. The loose strainer was used when filling liquids into a vessel<sup>71</sup>, whereas the ‘side-spouted strainer jug’ – having the wall pierced where the spout was fixed to the body – was used for emptying.

Loose strainers in pottery were common in Cyprus from the CG I period (1050-950) onwards, as examples in the White Painted I and Plain White I Ware may show<sup>72</sup>. A good Cypriot comparison for the Lambros sieve vessel no. 20 (Figs. 40-44) is now in the T. N. Zintilis Collection in the Allard Pierson Museum (Amsterdam): a Cypriot Black-on-Red II (?) sieve vessel with loose strainer lid, dating to about 750 – 600 B.C. (Figs. 47-48)<sup>73</sup>. Remarkably, the lip zone is decorated with a broad zigzag line, which recalls the Attic example of the Lambros Group. Also the decoration of the sieve vessel, now in Vienna, is described as a zigzag, in combination with a meander, below the rim<sup>74</sup>.

In Greece, only two instances of loose strainers have come to our knowledge: an unpainted LG (?) loose strainer from Athens and a LG I piece from Asine. The latter is provided with a basket handle and probably served as a strainer for a trefoil-mouth jug<sup>75</sup>. Both have a deep concave central part, which recurs on the strainer lid of the Cypriot example in Amsterdam (Fig. 48), and which might, ultimately, derive from metal prototypes of such loose strainers.

In the case of the Lambros example no. 20 and the ones in London, Leiden, Amsterdam, Laon and Tiryns, a spout is applied below the sieve part of the vessel (Figs. 40-42). The sieve can, consequently and theoretically, only have functioned while filling a liquid into the vessel. However, in all of the Attic sieve vessels the strainer top is either horizontal or even domed, as in the example of the London sieve vessel, and thus useless. Was it, therefore, perhaps only the oriental idea of *sieving* that was taken over,

without having a chance of practical use in daily life<sup>76</sup>? P. E. Corbett explained the sieve vessels as ‘hospital utensils’, meant to facilitate the feeding of ill and invalid people<sup>77</sup>. This concept is not to be excluded, but cannot have been the only function. It does not explain the impractical feature of the strainer top. Nevertheless, exactly by this peculiarity, the Attic pieces are best connected with Cypriot loose strainers and the Cypriot example in the Zintilis Collection (see Figs. 47-48), where the loose strainer lid could have also functioned solely, when filling a liquid into a vase. The larger hole in the middle of the Lambros piece no. 20 (Fig. 44) and its close counterpart in London would probably originally have been closed with a plug or a stopper. Perhaps it only served to enable cleaning the vase after having used it.

Another feature also connects the Attic sieve vessels with the second type of Cypriot strainers. The spout of the sieve vessel in the Lambros Group (no. 20; Figs. 40-42, 44) finds no precedent in the Attic pottery repertoire before the LG period. Also thereafter, spouts remain an uncommon feature in Attic pottery. One may distinguish two types of spouts: the tubular spout (see below) and the one which is half-rounded in section, thus creating an open upperside. They all are set at right angles to the handles. The spout of the sieve vessel no. 20 (Figs. 40-42, 44), of the latter type has an exact counterpart on the sieve vessel in London<sup>78</sup>; both vessels may even have been made in the same workshop. Also the spout of the sieve vessel in Amsterdam is close to the Lambros and the London piece.

<sup>69</sup> Inv. APM 3544: it is, except for a wrong attribution to Boeotian Geometric in *Algemeene Gids* 1937, no. 1224, still unpublished.

<sup>70</sup> Müller und Oelmann 1912, pl. 18,9; Corbett 1954, pl. 26; Masner 1892 4, cat. 37; CVA Laon (1), III H, pl. 2,5,8; CVA Munich (1952) (3) pl. 119,6-7; the piece in Leiden is still unpublished (Inv. I 1964/9.1).

<sup>71</sup> Occasionally loose strainers, used as a pair, served the purpose of colanders, e.g. for drying washed lettuce leaves, cf. Højrup 1972, 155.

<sup>72</sup> Gjerstad 1948, fig. 3,1; Amathus T. 22/25; fig. 11,1 Lapithos T. 425/42; fig 16,1 unknown provenance (Bichrome II [950-850]).

<sup>73</sup> Inv. Z. 605; height 7.6 cm, max. diameter 7.6 cm. We thank S. M. Lubsen-Admiraal, who is presently preparing the catalogue of the T. N. Zintilis Collection, for her kind permission to mention the piece and reproduce a photo.

<sup>74</sup> Masner 1892, 4, cat. 37.

<sup>75</sup> Athens: Droop 1905/1906, 88-89 fig. 10; Asine: Frödin – Persson 1938, 327-328 fig. 222,8.

<sup>76</sup> That these vessels were used in daily life, is suggested by the fragment of a sieve vessel top or strainer fragment in an Athenian settlement context. Burr 1933, 562 fig. 21.

<sup>77</sup> Corbett 1954, 66-67.

<sup>78</sup> Corbett 1954, pl. 26.



Smaller spouts of the type, also set directly underneath the lip of the vessel are known as well, like on the sieve vessel in Leiden<sup>79</sup>. These characteristics are typical for spouted vessels on the Levant Coast. Also in Cyprus this type of spout occurs, both on imported vessels and on Cypriot products, made locally under influence of Phoenician and Palestine pottery<sup>80</sup>. The Cypriot examples of these spouts seem to be of the shorter variant, like the Attic ones. Remarkably, in all these Cypriot cases the spout is part of a strainer jug and is placed at the point, where the wall is pierced to form a sieve. It is clearly meant to sieve the contents of the vessel, while emptying. Vessels, where such sieving spouts were applied, are mainly jugs, also called 'side-spouted strainer jugs'<sup>81</sup>. In Cyprus they are thought to have become rare after 800 B.C., on the Levant Coast they seem to continue<sup>82</sup>. Only the Munich example has a sort of spout, attached high at the lip and thus well above the sieve part. As in the case of the Cypriot strainer jugs its function was to sieve the contents of the vessel, while emptying.

On Greek sieve vessels also another, tubular type of spout was used, which finds its predecessors in Cypriot pottery<sup>83</sup>. The sieve vessel from Tiryns has a narrow small tube, set almost horizontally halfway on the body, like on some Attic spouted kantharoi<sup>84</sup>.

The potter making the Lambros sieve vessel no. 20 in Attica, somewhere in the third quarter of the eighth century B.C., must have had some idea of an original connection between the half-cylindrical open spout and the sieving function of the vessel to which it was applied. In an Attic context, he changed the vessel into a skyphos-shape and put the sieving part on top, leaving the spout for pouring functions only<sup>85</sup>. The sieve vessel in Amsterdam is probably the earliest amongst Attic sieve vessels and is the only one with the spout placed opposite of a vertical strap handle<sup>86</sup>. As already indicated above, its shape is derived from the jug, rather than from the skyphos.

#### *Pomegranate* (no. 21)

In two recent publications the phenomenon of Attic Geometric clay pomegranates is being dealt with extensively<sup>87</sup>. It is to the merit of S. Immerwahr that the fundamental distinction between pomegranate vases and model fruits – which is essential to the understanding of their function – as well as their possible source of inspiration has been discussed<sup>88</sup>. The piece attended to (no. 21; *Fig. 45*) belongs to the group of pomegranate model fruits, a type which was introduced in the Attic pottery

repertoire in the Late Geometric Period, and which imitates fairly naturally the fruit hanging from the tree. The fruit itself played an important role in cultic and funeral rituals, as an attribute for Aphrodite, for Hera with a fertility connotation, as well as for Demeter and Persephone as a symbol of life – after death – (for its 'blood-red juice')<sup>89</sup>. The introduction of the model fruits in Greece and their popularity in LG times were explained by Immerwahr as the result of Ionian influence, mainly originating in the Ionian sanctuaries, rather than the result of Phoenician or Cypriot involvement. The question she asks at the end of her article, "*Was the pomegranate not yet grown in mainland Greece?*", lies at the heart of the matter<sup>90</sup>. Following her own observation, that the fruit models could only have come into being by an actual knowledge of the natural fruit, hanging from the tree, one should answer this question positively. However, her own presentation of the archaeological testimonies for pomegranate vases, models etc., over a longer period of time, from the Late Bronze Age till LG times, could also lead to the conclusion of a direct eastern transmission. The actual imitation or adaptation of the pomegranate fruit in pottery only took place in periods, when strong connections with the East were evident otherwise. For one of these periods,

<sup>79</sup> Leiden I 1964/9.1 (unpublished).

<sup>80</sup> Culican 1982, 47–50, with references.

<sup>81</sup> Culican 1982, 47.

<sup>82</sup> Culican 1982, 50.

<sup>83</sup> This tubular spout may, at least in Cyprus, ultimately derive from the spout of the Mycenaean stirrup jars, cf. Gjerstad 1948, fig. 4,20 (spouted stirrup jar), fig. 4,18 (spouted jar), in White Painted I Ware (1050–950 B.C.). See also the remark of Culican 1982, 50. Still later, in the White Painted IV Ware (750–600 B.C.), this spout is very common, Gjerstad 1948, fig. 29,7–11.

<sup>84</sup> Müller und Oelmann 1912, pl. 18,9. Spouted kantharoi, e.g. CVA Munich (1954) (3) pl. 119,3–4.

<sup>85</sup> It is perhaps no coincidence, that exactly in the LG Ib period also another type of pottery with spout is introduced in Attica, the spouted krater, which was an invention of the Hirschfeld Workshop, Coldstream 1968, 43. This vessel was very popular in Euboean pottery and on Ischia, perhaps hinting at its place of origin or transmission.

<sup>86</sup> Amsterdam: APM 3544, see above.

<sup>87</sup> Kourou 1987; Immerwahr 1989. See also Muthman 1982.

<sup>88</sup> Immerwahr 1989, 398.

<sup>89</sup> Immerwahr 1989, 408.

<sup>90</sup> Immerwahr 1989, 408–409. In the Levant evidence for pomegranate fruits date back to Neolithic times, with evidence also for the Middle Bronze Age, Immerwahr 1989, 402, with nos. 20 and 21. In this connection it deserves mention, that the earliest evidence for the fruit in a Phoenician context comes from the excavations of H. G. Niemeyer in Carthage. As analyses by H. J. Kroll (Kiel) have shown, botanical remains from Carthage, Phase III, dating to the second and early third quarter of the seventh century, belong to *punica granatum* (KA 91/190). We thank H. J. Kroll for his permission to mention his preliminary results.

the Late Bronze Age, corroboration with the actual shipment of pomegranates is now found among the plant remains in the *Ulu Burun* shipwreck of the late fourteenth century<sup>91</sup>. Thus, in Immerwahr's own words, "*Its exotic nature may have contributed to its appropriateness as an attribute for divinities and as a gift for mortals in their journey to the Underworld*"<sup>92</sup>. The Lambros pomegranate would certainly have answered perfectly to the latter part of this observation.

#### GREEK SHAPES

##### *Pitchers* (nos. 1, 3 and 4)

The giant pitcher (cf. no. 1; *Figs. 1-4*) is an innovation of the LG Ia period, first found in the Dipylon Workshop, and probably an invention of the Dipylon Master himself<sup>93</sup>. Its roots, however, lie in the Attic MG pottery repertoire. Like the giant oinochoe (see hereafter), this oversized vessel could hardly have been of practical use in daily life. It seems to have been destined for the grave, like so many of the pottery shapes of the Dipylon Master<sup>94</sup>. Although in contrast to the pedestalled kraters and belly-handled amphorae, the giant pitcher and the giant oinochoe were not used as grave monuments, but went into the grave. Apart from their out-size dimensions, their occurrence in graves, which otherwise display some wealth in their gravegoods, like the example of the Ivory Grave, point to a connection of these vases with persons of some rank<sup>95</sup>. Therefore, they may be considered as funeral vases, marking the wealth and status of the deceased.

The two smaller pitchers no. 3 (*Figs. 7-11*) and no. 4 (*Figs. 12-14*) are much easier to handle and are of a format, that could well have been used in daily routine. The mouth of no. 3 is even slightly spouted, to facilitate pouring (*Figs. 7-9*).

##### *Oinochoe* (no. 2)

Like the giant pitcher, the giant oinochoe was an innovation of the LG I period, and most likely the invention of the Dipylon Master. This shape also stood in a long Attic tradition and ultimately went back to a MG shape<sup>96</sup>. In combination with the giant pitcher, it was used for funeral purposes only, and may be considered as a status marker (see above). In this case the giant pitcher no. 1 (*Figs. 1-4*) and giant oinochoe no. 2 (*Figs. 5-6*) did form a pair, stemming from the same (Lambros) Workshop<sup>97</sup>.

##### *Pyxis* (no. 19)

In a monography, published 1988 by B. Bohen, a sound classification of the Geometric pyxides from the Kerameikos was made. The pyxis in the Lambros Group (no. 19; *Fig. 39*) belongs to the group of the so-called horse pyxides, which is a typical Attic class. Pyxides served as storage vessels for goods, varying from jewellery to food and even liquids<sup>98</sup>. In many cases the pyxides seem to have been made for grave-use only.

##### *Skyphoi* (nos. 15-18)

In the Greek Geometric world, the skyphos was the most favoured and wide-spread shape, standing in an indigenous pottery tradition<sup>99</sup>. Its evolution has been discussed at length elsewhere<sup>100</sup>. It was one of the few Greek shapes which underwent imitations and adaptations in many non-Greek regions<sup>101</sup>. The skyphos served several functions as a drinking- and eating vessel; covered with a lid, it was useful as a small storage container (pyxis). As shown above, the skyphos-shape was transformed into a sieving vessel, probably because of its being one of the commonest shapes in Attic potteries.

##### *Tankards* (nos. 11-13) – *Mug* (no. 14)

The tankard is generally seen as the product of an independent Attic pottery tradition, developing in the MG II period from the MG I mug, and gaining immense popularity in the LG period<sup>102</sup>. The shape may have influenced the development of high drinking vessels in another cultural sphere, like in the Phoenician colonies in the Western Mediterranean. High drinking vessels like the thistle vase or thistle-head beaker appear during the earliest period of these colonies, in the second half of the eighth century. They have no parallels either in the pottery repertoire of the Levant or Cyprus, but they occur on Malta, in Carthage and in Southern Spain<sup>103</sup>. In contrast to the Attic tankards, the Phoenician thistle

<sup>91</sup> Haldane 1990, 57-58; Jones 1993, 301.

<sup>92</sup> Immerwahr 1989, 409.

<sup>93</sup> Coldstream 1968, 34 pl. 7e.

<sup>94</sup> Coldstream 1968, 33-35.

<sup>95</sup> Perrot 1895, 275 fig. 1.

<sup>96</sup> Coldstream 1968, 34.

<sup>97</sup> Coldstream 1968, 44 cat. 1-2.

<sup>98</sup> Bohen 1988, 5-7.

<sup>99</sup> Desborough 1952, 92.

<sup>100</sup> Coldstream 1968, the chapters on 'shape'.

<sup>101</sup> cf. Crielaard 1990, 9-12; Briese und Docter 1992, with further references.

<sup>102</sup> Coldstream 1968, 23.

<sup>103</sup> Culican 1982, 71-73, fig. 12; Aubet 1976, 14-17. The 'prototypes' for the shape, that P. Cintas thought to have found in the Syro-Palestinean area and Egypt are too obscure and may be neglected, see Aubet 1976, 15 n. 43 with references.

vases – as Phoenician drinking vessels in general – have no handle at all.

A comparable phenomenon may perhaps be seen in the development of the Laconian *lakaina*. This high drinking vessel with two diagonally placed horizontal handles on the lower body, developed in LG times from the skyphos with high rim, apparently within a local Laconian pottery tradition, as C. M. Stibbe concluded in a recent study<sup>104</sup>. The evolution towards such a high drinking vessel may, however, be provoked by knowledge of Attic examples of comparable general shape, but with different handles, like the tankard.

With regard to the use of Attic tankards, it may be clear from finds in settlement contexts, that they were used in daily life<sup>105</sup>.

From the tankard, the small mug developed, sometime between the LG II and the Proto-Attic Period, like the example no. 14 (*Fig. 34*). These mugs are smaller than the tankards and have a tendency to taper towards the mouth, where they have their widest diameter.

#### MORPHOLOGICAL ELEMENTS OF ORIENTAL INSPIRATION

##### *Plastic ribs/gadrooning* (nos. 1, 20 and 21)

The use of plastic ribs or gadrooning in pottery is indisputably taken over from metal examples. Ultimately, the connection seems to point towards the Near East, where from the ninth century onwards the shallow ribbed metal bowl became a very popular vessel. During the second half of the eighth century, the popularity of this bowl, with this specific morphological element, spread even as far westwards as Central Italy, where the form was copied in metal<sup>106</sup>. Also from Cyprus examples are known, so that a transmission of the element into the Greek geometric pottery repertoire via Cyprus is not to be excluded<sup>107</sup>.

The first adoption of gadrooning in Attic pottery is to be seen in two MG I examples, a kantharos from Kerameikos Grave 43 and a skyphos from Agora Well B 18:9. It must be considered, as J. N. Coldstream rightly states it, “(...) *the first experimental use of this metallic device* (...)”<sup>108</sup>. But it is only in the LG I period, that this morphological trait is more often encountered in Attic pottery. Two examples in the Lambros Group show this use of gadrooning, the pitcher no. 1 (*Figs. 1-4*) and the spouted sieve vessel no. 20 (*Figs. 40-43*). In both cases these ribs are further accentuated by the

pictorial device of tongues, cross-hatched (no. 20) or multiple zigzags (no. 1). In the LG Ib repertoire of decorative elements the cross-hatched tongue is a new motif, that comes into use especially on drinking vessels, with or without real gadrooning. The pictorial use of cross-hatched tongues is, as Coldstream observed, “(...) *nothing but flattened gadrooning – a further adaptation of a metallic device* (...)”<sup>109</sup>. Real gadrooning seems to pass out of fashion after the LG Ib period.

The shallow vertical mouldings on the pomegranate no. 21 (*Fig. 45*) are not to be considered as decorative gadrooning, but as imitations of the fruit’s natural appearance.

##### *Neck-ridge* (nos. 8, 9)

Apart from the two examples of the use of a neck-ridge within the Lambros Group, nos. 8 and 9 (*Figs. 20-27*), which were clearly embedded in the adaptation of a whole Phoenician and, later, a Cypriot shape (see above), three other Attic vases bear the same rare oriental feature. One is the upper body of an Attic LG hydria from the Athenian Agora, found in the filling of well P (*Fig. 49*)<sup>110</sup>. The second is a lekythos with neck-ridge from Trachones Grave A 23 (*Fig. 50*), from the Attic countryside, dating shortly after 700 B.C.<sup>111</sup>. It shows the same row of dots on the ridge, framed by multiple horizontal lines. Thirdly, the juglet in the Fitzwilliam Museum, Cambridge, has a neck-ridge, remarkably set above the attachment of the handle<sup>112</sup>.

##### *Off-set handle* (nos. 1, 9, 15, 16)

Within the Lambros Group, four vases show the fairly decorative morphological feature of an off-set application of the handle<sup>113</sup>. In the case of no. 1 (*Figs. 3-4*), but especially in no. 9 (*Figs. 23, 25-27*) this element occurs on a vertical handle. This technological aspect is not uncommon in Attic LG pottery. But it is most regularly used in Argive Geometric pottery, more so than in Attica<sup>114</sup>.

<sup>104</sup> Stibbe 1990, 74. Also Coldstream 1968, 215.

<sup>105</sup> Cf. Brann 1961, pl. 16, L20.

<sup>106</sup> Luschey 1939, 79-83; Howes Smith 1984, 74-77.

<sup>107</sup> Luschey 1939, 77, cat. 18-20, p. 82-83.

<sup>108</sup> Coldstream 1968, 18 with ns 4 and 5.

<sup>109</sup> Coldstream 1968, 50-51.

<sup>110</sup> Brann 1961, 136-138, pl. 15, P8; Hydria. P 21434, preserved height 16.5 cms. With double-rolled handle (!).

<sup>111</sup> Inv. Tr. 313, height 16.3 cms.; Geroulanos 1973, 31, pls. 16, 3.2, 30.2, 47.8.

<sup>112</sup> It was said to be found in Boeotia, but was purchased in Athens. An Attic manufacture seems to be likely. Gardner 1897, 6 cat. 22 pl. 2, 22.

<sup>113</sup> Also the juglet in Cambridge, see n. 64 and 112, above.

<sup>114</sup> See the plates in Courbin 1966.



Another version of this feature can be seen in the horizontal handles of the skyphoi nos. 15 and 16 (Figs. 35-36), which is not uncommon in Attic LG pottery<sup>115</sup>. Cypriot affinities may be suggested, though, by examples like a Plain White II Bowl from Amathus T. 10/43<sup>116</sup> and another White Painted III Bowl from Amathus T. 7ii/230<sup>117</sup>.

#### DECORATIVE ELEMENTS OF ORIENTAL INSPIRATION

##### *Concentric circles* (no. 7)

Within the pottery of the LG Ib – LG Iia period a class of oinochoai is set apart, that uses the typical Cypriot motif of compass-drawn concentric circles on the body. The class may be divided into two groups, belonging to two different workshops. The largest group was named by J. N. Coldstream – after a first discussion by H. Marwitz – *the Concentric Circle Group*<sup>118</sup>. The second group was included by Coldstream into the later phase of the Dipylon Workshop (LG Ib)<sup>119</sup>.

The Concentric Circle Group of J. N. Coldstream consisted of 15 oinochoai (CCG 1-15), which we list hereafter, updating the bibliography. We add some pieces, which were already attributed to the group by H. Marwitz; moreover the unpublished ones, which are now in the museum at Brauron and were listed by T. Rombos, and finally, an example not mentioned previously<sup>120</sup>:

CCG 1:Athens, Kerameikos 1327, from Grave 48. Height 21.6. Kübler 1954, pl. 76; Marwitz 1959, 87; Coldstream 1968, 74 cat. 1; Rombos 1988, 486 cat. 267.

CCG 2:Lambros no. 7 (Fig. 19). Height 20 (?). See above.

CCG 3:Frankfurt am Main VF Beta 222, from Athens. Height 24.4. Schweitzer 1918, 143-144; Schaal 1923, pl. 1b-c; Marwitz 1959, 87; CVA Frankfurt (1964) (1) pl. 5,2-3; Coldstream 1968, 74 cat. 3; Rombos 1988, 487 cat. 275.

CCG 4:Brussels A 1676. Height 23. CVA Brussels (1949) (3) pl. 2,11a-b; Marwitz 1959, 87; Coldstream 1968, 74 cat. 4; Rombos 1988, 487 cat. 276.

CCG 5:Athens 14424, from Anavysos. Height 24. Kastriotis & Philadelphus 1911, 117, fig. 5; Marwitz 1959, 87; Coldstream 1968, 74 cat. 5; Rombos 1988, 488 cat. 280.

CCG 6:Athens 193, from Kerameikos. Height 22. Wide 1899, 212 fig. 90; Collignon et Couve 1902/04, 62 cat. 242 pl. 13,242 (with older references); Schweitzer 1918, 143; Marwitz 1959, 87; Coldstream 1968, 74 cat. 6; Rombos 1988, 488-489 cat. 281.

CCG 7:Athens 18154, from the Empedocles Collection. Height 24. Coldstream 1968, 74, cat. 7; Rombos 1988, 491 cat. 290 pl. 65a-b.

CCG 8:Athens, marked G 15, from Marathon. Height?. Sotiriadis 1934, 36 pl. 9; Coldstream 1968, 75 cat. 8; Rombos 1988, 486 cat. 269.

CCG 9:London 77.12-7.12. Height 23.5. Coldstream 1968, 75 cat. 9 pl. 13d; Kahane 1973, pl. 28,1; Rombos 1988, 489 cat. 284.

CCG 10:London 77.12.7-13 (?). Height 22. Schweitzer 1918, 143 (with references); Benton 1934/35, 104 fig. 11a; Marwitz 1959, 88; Coldstream 1968, 75 cat. 10; Rombos 1988, 489-490 cat. 285.

CCG 11:London market. Height 24. Sale Sotheby, London 16.11.1959 nr. 174; Coldstream 1968, 75 cat. 11; Rombos 1988, 490 cat. 287.

CCG 12:Boston 25.43, from the Schliemann Collection. Height 17.8. Fairbanks 1928, pl. 23,269c; Chase 1950, 15 fig. 13; Marwitz 1959, 88; Coldstream 1968, 75 cat. 12; Schweitzer 1969, fig. 57; Rombos 1988, 492 cat. 291 pl. 74b.

CCG 13:London 1920.10-14.4, from Vari. Height?. Coldstream 1968, 75 cat. 13; Rombos 1988, 490 cat. 286.

CCG 14:Paris CA 2999. Height 23. CVA Paris (1972) Louvre (16) III H b, pl. 18,1-2; Coldstream 1968, 75 cat. 14; Rombos 1988, 490-491 cat. 288 pl. 60.

CCG 15:Berlin 3374, from Aegina. Height 23. Schweitzer 1918, 144 fig. 32; Neugebauer 1932, 7-8; Willemssen 1954/55, Beilage 4; Marwitz 1959, 88; Friis Johansen 1961, 24-26 pl. 8; Coldstream 1968, 75 cat. 15; Schweitzer 1969, fig. 56; Kahane 1973, pl. 28,2; Heilmeyer 1988, 30-31 no. 8; Rombos 1988, 491 cat. 289 (reference to pl. 60b is wrong, since the Berlin vase is not depicted).

<sup>115</sup> e.g. an Attic LG Ib skyphos with metopal design, carrying birds, which was made in the Lambros Workshop and yielded by Kerameikos Gr. 71; Kübler 1954, 258 pl. 96; cf. Coldstream 1968, 48 pl. 10f.

<sup>116</sup> Gjerstad 1935, 67 pl. 17; Gjerstad 1948, fig. 17, 9 (950-850).

<sup>117</sup> Gjerstad 1935, 41 pl. 10; Gjerstad 1948, fig. 18, 2 (850-750).

<sup>118</sup> Marwitz 1959, 86-88, 93-94 (Group VIII); Coldstream 1968, 74-76. The name derives ultimately from S. Benton, who used it already as early as 1934/35. Benton 1934/35, 103; Schweitzer 1918, 143-146; Borell 1978, 88.

<sup>119</sup> Coldstream 1968, 32 (Cat. 41. 41a). 75.

<sup>120</sup> Marwitz 1959, 86-88; Coldstream 1968, 74-75; Rombos 1988, 486-492. Especially the references by T. Rombos are rather inaccurate, see also the remark to CCG 15. It remains unclear, whether the three examples from Asine do also belong to this group (Frödin – Persson 1938, 325 fig. 221,7-9). In two cases they show compass-drawn concentric circles at their sides, as well as the wavy-serpent line on the backs of their handles (see below). The circles of a third fragmentary piece were drawn free-hand. They all share a high torus-foot, a feature uncommon in the Concentric Circle Group.

- CCG 16: Baltimore K 116, from Kemper Simpson Collection. Height 22.5. Reeder Williams 1984, 133-134 no. 98<sup>121</sup>.
- CCG 17: Trachones Tr 288, from Grave A 34. Height 23.5. Geroulanos 1973, 39 pl. 6. 29,3. 49,3; Rombos 1988, 487-488 cat. 277.
- CCG 18: Agora P 12104. Height 29. Shear 1939, 227 fig. 21; Marwitz 1959, 87; Brann 1961, pl. 14, L10; Brann 1962, pl. 4, 43.
- CCG 19: Bonn 830, from Athens. Height 14. Schweitzer 1918, 144; Marwitz 1959, 89 figs. 9-10.
- CCG 20: Basle market. Height 22.5. MuM 51 (1975), 23 pl. 8, 60; Rombos 1988, 486-487 cat. 271.
- CCG 21: Athens 151, from Kerameikos. Height 22. Wide 1899, 212 fig. 91; Schweitzer 1918, 143; Marwitz 1959, 83.
- CCG 22: Athens, from Anavysos Grave X. Height? Themelis 1973/74, 110 pl. 85a; Rombos 1988, 486 cat. 270.
- CCG 23: Brauron, from Merenda. Height? Rombos 1988, 487 cat. 272.
- CCG 24: Brauron, from Merenda. Height? Rombos 1988, 487 cat. 273.
- CCG 25: Brauron, from Merenda. Height? Rombos 1988, 487 cat. 274.
- CCG 26: Athens, from Erisichthonos cemetery Grave VI. Height? Alexandri 1967, pl. 81a; Rombos 1988, 488 cat. 278.
- CCG 27: Brauron, from Anavysos Grave XXII. Height? Rombos 1988, 488 cat. 279.
- CCG 28: Brauron, from Anavysos Grave XXII. Height? Rombos 1988, 489 cat. 282.
- CCG 29: Athens. Height? Kallipolitis 1968, pl. 3; Rombos 1988, 489 cat. 283.
- CCG 30: Sarajevo 18, from Athens. Height 23. Bulanda 1912, 268, no. 47 fig. 22; Schweitzer 1918, 143; Marwitz 1959, 86; CVA Sarajevo (1975) (1) 18-19 pl. 9, 2-3.

Considering the heights of these jugs, attention should be paid to the following differences: the height of 21 examples is given, 18 have a range of height between 20 and 24 cms. whereas two (CCG 12, 19) are of smaller size, 14 and 17.8 cms. resp. Only one example (CCG 18) is of comparatively huge size, 29 cms. For nine of the pieces the height is not given.

Mention must be made of the execution of the decoration. As J. N. Coldstream correctly saw, the vertical circles of the earliest pieces nos. CCG 1 and 2 (Fig. 19) were compass-drawn<sup>122</sup>. But at least two more of his list (CCG 4 and 9) show this striking feature. Of the extended list above, five can be added, being painted in the same technique (CCG

17, 18, 20, 22, 26). Another six certainly were drawn freehand (CCG 3, 6-7, 12, 29-30). Of the remaining pieces, the technique used cannot be deduced from the publications.

The oriental links of this group are generally accepted, since their first discussion by B. Schweitzer in 1918. The closest parallel to the eastern prototypes is oinochoe no. 7 (CCG 2, Fig. 19), both in shape and decoration. It shows most of the traditional attributes of the Phoenician 'spherical' and 'ring base neck-ridge jug'<sup>123</sup>, with vertical concentric-circle decoration. Within this group, three wares are to be distinguished: *Bichrome Ware*, with decoration of thin black and broad red zones of many various combinations, *Black Painted* and *Red Painted Ware*, with black or red decoration only. The striking design of oinochoe no. 7 – and of the oinochoai of the Concentric Circle Group in general – is derived from the Phoenician Black Painted Ware. The original pattern of decoration was worked out into regularly spaced thin circles, covering both sides of the body. The center, filled with a simple eight-stoked star, carries reminiscence of the oriental 'maltese cross', which was often used as a filling motif in combination with the Phoenician<sup>124</sup> and Cypriot<sup>125</sup> concentric-circle design. Of the Concentric Circle Group, oinochoe

<sup>121</sup> It was published by E. Reeder Williams as Boeotian, for which there seems to be no reason. The oinochoai of the Boeotian Oinochoe Workshop in Thebes are decidedly different, cf. Ruckert 1976, 41-44, 59-60 and especially pls. 1-4.

<sup>122</sup> Coldstream 1968, 75, apparently misinterpreted by T. Rombos (1988, 259), who considered all oinochoai to be decorated free-hand. The Concentric Circle Group is foreshadowed by two oinochoai, which clearly have compass-drawn circles on their sides. One stems from the Dipylon Workshop, see n. 120.

<sup>123</sup> Initially, Schweitzer 1918, 144-145, mentioned this scheme of decoration to be dependent on Cypriot 'pilgrim flasks'. It is not the lenticular shaped 'pilgrim flask' but this type of jug, which produced the model of both shape and decoration for the oinochoai under discussion. For the typological development of these jugs in the Phoenician homeland, cf. Briesse 1985, types I and II. Those found in Cyprus were treated by Bikai 1987. cf. a recent discussion of the Concentric Circle Group by Rombos 1988, 259: "The dependence of this strange class of Attic oinochoae on an Iron Age I and II Cypriot type of jug, the so-called 'pilgrim flask', with concentric circles and which derives ultimately from Mycenaean prototypes, is well known". This indiscriminate translation of a passage in Kahane (1973, 127), originating in Coldstream's reference to Gjerstad 1948 (including the erroneous use of 'pl.' instead of 'fig.'), and the introduction of a wrong terminology – since the piece referred to is no pilgrim flask at all – are simply misleading. The dependence of the oinochoai is, except for their decoration, as shown above.

<sup>124</sup> cf. e.g. Briesse 1985, 74 fig. 13,1 (Tell Masos); 76 fig. 14,3 (Megiddo); 92 fig. 22,5 (Tyros).

<sup>125</sup> cf. e.g. Cypriot White Painted I and Bichrome I Ware jugs from Palaepaphos-Skales: Karageorghis 1983, fig. 63 T. 45/60; fig. 71 T. 48/5; fig. 79 T. 49/62. 63; fig. 144 T. 77/21; fig. 149 T. 79/50.

no. 7, being of very pure and hardly modified shape and decoration, is the closest Greek adaptation of the Phoenician model<sup>126</sup> yet known.

#### *Crossing system* (no. 10)

The 'crossing system' combined with the concentric-circle decoration, as used for juglet no. 10 (Fig. 28), is foreign to both Cypriot and Phoenician pottery. Nevertheless, it is obviously inspired by a Cypriot decoration pattern, which consists of *isolated groups* of concentric circles on all four sides of the body (cf. Fig. 46)<sup>127</sup>; compare White Painted I-III or Bichrome II-III Ware 'spherical' and 'ring-based juglets' (1050-750 B.C.)<sup>128</sup>. The black painted concentric circle decoration with groups of two or three thin circles recall examples of Phoenician (so-called 'Local Black-on-Red') jugs, dating approximately to the mid-eighth century B.C.<sup>129</sup>. The use of compasses for drawing multiple circles was most probably already introduced earlier in Attica, in the Protogeometric Period as a result of Phoenician and/or Cypriot involvement<sup>130</sup>.

#### *Horizontal neck-decoration* (nos. 6-9)

The neck, another important and significant part of this type of vessel was highlighted by a kind of decoration, which had been inspired by Phoenician pottery and modified to Greek taste. The neck ridges of no. 8 and 9 are emphasized by dotted lines, the upper and lower compartments of the necks by zones of black lines and solid black bands, whereas the transitions from body towards neck are marked with double or triple black lines<sup>131</sup>.

#### *Connected circles* (no. 15)

The motif of small connected circles encircling one in the centre, as used for the skyphos no. 15 (Fig. 35), is probably unique in its precision. It consists of neatly compass-drawn and evenly spaced dotted circles, and corresponds with the row of compass-drawn and dotted circles on the mouth of the vessel. Similar motifs occur on various vases of the LG I period, but are always drawn freehand<sup>132</sup>. The use of compasses for the drawing of circles closely corresponds to that of the oinochoai of the first phase of the Concentric Circle Group, among which no. 7 (CCG 2; Fig. 19) for which we suggested a Phoenician and Cypriot involvement, see above.

#### *Checked horizontal bar and pendent wavy lines* (no. 7)

This aspect of decoration, linking the two lateral systems of concentric circles on vases of the Concentric Circle Group, is ultimately derived

from the Cypriot '*intersecting circle design*'<sup>133</sup>. This design was hardly used by Phoenician painters. On jugs they usually linked the space between the lateral groups of circles with horizontal strokes and/or vertical patterns, as cross-hatched lozenges, sketched floral motives or others<sup>134</sup>. Exactly this linking element was adopted for the oinochoai of the Concentric Circle Group. Also the motif of the pendent wavy lines is derived from the vertical patterns on these Phoenician jugs, as for example a jug from Megiddo of the early tenth century B.C.<sup>135</sup>. The motif of pendent wavy lines became fairly popular in Attic LG pottery, perhaps by this time also overlapping with the idea of painted serpents<sup>136</sup>.

#### *Serpents, painted and modelled* (nos. 1-4, 7 and 12)

The Lambros Group has at least two instances of snakes painted on the handles, no. 1 (Figs. 1, 2 and 4) and no. 2, with their heads touching the mouth

<sup>126</sup> The decoration of the jug from Khirbet Silm (Chapman 1972, 88 fig. 10 no. 15, cf. ns. 50 and 51 above) bears obvious traits of Phoenician and Cypriot exchanges. With regard to the painted eye on the mouth and the triple horizontal line on the shoulder (intersecting-circle design), the above may be compared to Amathus T. 7/16. The continuity of this design into Cypriot pottery is most striking, as may be seen in the above mentioned jug from Amathus, which, in Phoenician pottery, hardly occurs in combination with vertical concentric circle decoration.

<sup>127</sup> A Cypriot Bichrome Red I (750-600) juglet from Cyprus in the T. N. Zintilis Collection, on loan to the Allard Pierson Museum (Amsterdam): Inv. Z. 173; height 8 cms, max. diameter 5.5 cms. We thank S. M. Lubsen-Admiraal, who is presently preparing the catalogue of the T. N. Zintilis Collection, for her kind permission to mention the piece and reproduce a photo.

<sup>128</sup> Gjerstad 1948, figs. 3, 12-13 and 17, 13, 9, 16, 4, 19, 3, 22, 9. Thus, its decoration cannot be compared to the 'intersecting circle design' of the Bichrome IV jug from Styli T. 11/3 (750-600), as did Coldstream 1968, 75 n. 2.

<sup>129</sup> Khirbet Silm: Chapman 1972, 141 fig. 30 no. 264 (catalogued as no. 158); Culican 1982, 58 fig. 4d; Tell el-Far'ah: Briese 1985, 88 fig. 20, 3; Megiddo: Briese 1985, 90 fig. 21, 4; Khaldeh: Culican 1982, 58 fig. 5a-b; Akhziv T. 20: Culican 1982, 74 fig. 6g-h. See also hereafter, n. 181.

<sup>130</sup> On the use of compasses: Eiteljorg 1980, 449-452.

<sup>131</sup> cf. in particular the class of Phoenician Bichrome ware "neck-decorated jugs", e.g. Bikai 1987, 18-24 nos. 190-273 pls. 11-12.

<sup>132</sup> cf. CVA Heidelberg (3) pl. 106, 1; CVA Cambridge (1) pl. 1, 19a.

<sup>133</sup> e.g. Amathus T. 7/16.

<sup>134</sup> cf. Briese 1985, types I-III: figs. 6, 2, 7, 5, 8, 2, 11-12, 9, 3-4, 6, 10, 1-2, 13, 1-2, 14, 1, 15, 1, 3-4, 19, 2-3, 20, 1, 21, 1-2, 4-6, 22, 1-2, 23, 1-2, 24, 1-3, 25, 2.

<sup>135</sup> Briese 1985, fig. 13, 2.

<sup>136</sup> cf. Brann 1962, 35, pl. 4, 42, there also on neck of large oinochoe (3rd quarter eighth century); cf. the oinochoe in Amsterdam, Allard Pierson Museum (Inv. APM 3348), with decoration of vertical wavy lines, alternating with straight lines, all around the body. CVA The Hague (1927), The Netherlands (1) II F, pl. 1, 5. Also on the neck of Attic 'SOS'-amphorae, Johnston and Jones 1978, 137.



of the vases. The motifs of the hatched serpent line (nos. 1 and 2; *Figs. 1-6*) – ‘snake meander’ as called by J. M. Davison<sup>137</sup> – as well as the dotted serpent line, as seen in pitcher no. 4 (*Figs. 12-14*) and tankard no. 12 (*Figs. 30-33*), are probably derivatives of the snake motif. In the representations (see e.g. nos. 1 and 2; *Figs. 1-4*) these painted snakes are dotted as well. The motifs of the hatched serpent line and the dotted serpent line were an innovation of the LG Ib period, probably late within the period, since both motifs were not used in the pioneer group of the LG I period, the Dipylon Workshop<sup>138</sup>. Also of the Concentric Circle Group, the handles of the oinochoai were decorated with a simple painted serpent line. In all instances, where the back of the handle was visible or described in the publication, this serpent line could be observed<sup>139</sup>. It is not unlikely, then, that in all other instances of this group the motif was used as well, including the Lambros oinochoe no. 7 (CCG 2; *Fig. 19*). It might even be – in combination with the idea of the vertical concentric circles – a sort of standard decorative programme used for these oinochoai.

The idea of attaching modelled snakes to handles of pitchers was adopted in Athens by the Birdseed Workshop, as J. M. Davison was able to show: four examples by the Birdseed Painter ‘himself’, two of the Birdseed tradition and two others, amongst which is our no. 3 (*Figs. 7-10*), belonging to the Rattle Group<sup>140</sup>. The Birdseed workshop is placed by J. N. Coldstream in LG Ila<sup>141</sup>. Already in 1939 R. S. Young saw, that the motif of the snake was one of the earliest oriental motifs to reach Attica<sup>142</sup>. In Cyprus plastic snakes on the handles of pottery vessels are known already as early as the eleventh and tenth centuries<sup>143</sup>. The cultic and especially the funeral connotation, given to the snake in Attic Geometric art, is too widely accepted than to justify further comment on this connection<sup>144</sup>.

#### *Pictorial programme of slaying of captured enemies* (no. 5)

The scene on the oinochoe no. 5 (*Figs. 15-17*) was given an epic interpretation by K. Friis Johansen, in considering it to depict three successive scenes from the seventh song of the Iliad. The impossibility of this interpretation, however, was clearly shown by N. Himmelmann-Wildschütz<sup>145</sup>. As G. Ahlberg-Cornell convincingly argued, the scene must be interpreted as the “(...) *disarming, maltreatment and slaying of captive enemies* (...)”<sup>146</sup>. The link with Assyrian art, which she was able to

establish, following a first suggestion in this direction by N. Himmelmann-Wildschütz, is very plausible. It is, therefore, worthwhile to cite her at some length:

*“There may be only one parallel in early Greek art for this cruel disarming, maltreatment and execution of defenceless adversaries. This is the scene on the krater Paris, Louvre A519 (...), where a Dipylon warrior is slain, transfixed by a spear to a transport wagon on which are heaped slain warriors. Such behaviour is not consistent with Greek ideas. It is quite a different thing that the Geometric fighting scenes represent the final stage in the fighting activities. The destruction and slaying of the disarmed enemy is, however, one of the favourite subjects of the Assyrian kings, met with on the palace reliefs. I believe that the scene on the Lambros oinochoe has been influenced by Assyrian monumental art.”*<sup>147</sup>

It remains uncertain how the transmission of this pictorial motif from Assyrian art into the Attic realm could have taken place. One could think of Greeks, who became familiar with Phoenician art or even with Assyrian monuments of the Levant coast, where the Assyrians gained considerable influence and control in this period. Alternatively, one might suggest a transmission via Cyprus,

<sup>137</sup> Davison 1961, 15 fig. B2,63.

<sup>138</sup> Coldstream 1968, 36. Painted and dotted serpents: e.g. CVA Paris (1972) Louvre (16) pl. 15; bordering vertically the handle of a LG Ib pitcher, CVA Frankfurt (1964) (1) pls. 6-7; Coldstream 1968, pl. 13c (Athens 14411) = Benson 1970, 28-29 pl. 6,1-2.

<sup>139</sup> The numbers refer to the list of oinochoai of the Concentric Circle Group (CCG), presented in the text (see above). CCG 1 (Kühler 1954, 242: “Stabhenkel mit Längsstreifen, dazwischen Wellenlinie”); CCG 4 (CVA Brussels [1949] [3] III H b, nr. 11: “[...] trait ondulé sur l'anse [...]”); CCG 14 (CVA Paris [1972] Louvre [16] III H b, 17: “[...] sur l'anse ronde, ligne ondulée verticale entre filets verticaux parallèles [...]”); CCG 16, 18, 19 and 30.

<sup>140</sup> Davison 1961, 59 with n. 12.

<sup>141</sup> Coldstream 1968, 67-70.

<sup>142</sup> Young 1939, 217; Davison 1961, 59 with n. 12. Davison's conclusion, that the modelled snakes are an orientalizing device borrowed from Corinth, seems to be unjustified since the examples in Attica predate the earliest (painted) snakes in Corinthian EPC pottery (cf. Coldstream 1968, pl. 21c). The parallel cited by Young, a krater from Corinth (T 2545) with a dotted snake painted in white, seems to be an Argive product by the Dance Painter and of LG II date; Coldstream 1968, 140-141 pl. 30a; Courbin 1966, 449-450 (“peintre du cratère de Corinthe”).

<sup>143</sup> Gjerstad 1948, fig. 4,14, White Painted I jug, now in London, CVA London British Museum (2), pl. 1,25.

<sup>144</sup> See e.g. Benson 1970, 23; Bohen 1988, 6 with n. 24.

<sup>145</sup> A good summary of the discussion is to be found in Ahlberg-Cornell 1992, 28-29.

<sup>146</sup> Ahlberg 1971, 57; Ahlberg-Cornell 1992, 29.

<sup>147</sup> Ahlberg-Cornell 1992, 29.

where similar and related motifs were known. So the motif of the vanquishing pharaoh, standing triumphant over his enemies, ultimately derives from Egyptian art, but it was taken over by Phoenician iconography for the Phoenician 'smiting Ba'al'. It reoccurs on many Phoenician bronze and silver bowls from Cyprus<sup>148</sup>.

*Motif of 'Master of the horses' or 'Horse-tamer' (no. 4)*

The motif of a man with a horse on either side has been discussed several times, last by T. Rombos in connection with the oinochoai of the Concentric Circle Group, of her 'subgroup IV', with only one representative, CCG 15<sup>149</sup>. Horses were apparently very popular on oinochoai of this group, since they are represented on 14 out of 30 examples (CCG 3-6, 9-11, 13-15, 17, 26 and 28-29). Most of these show the motif of either 'two horses at the manger' or just a single horse. The preference for horses is generally linked with (Attic) aristocratic values<sup>150</sup>.

The 'Master of the horses' motif first occurs in LG Ib, but is more common in the LG II period<sup>151</sup>. Its origins may be sought in the Near East, where the motif of 'Master/Mistress of the Animals' is often encountered<sup>152</sup>. T. Rombos strongly denied an oriental origin for the Attic motif, "(...) because the horse played no role in Oriental religion (...)"<sup>153</sup>. This may be true, but poses no valid objection to an oriental origin for the motif. Rather, the Attic painter took over the oriental scene of a human holding (or standing between) two animals and adapted it to the Attic realm, making it an appealing and fitting subject for his Attic clients.

*Rattle scene (no. 3)*

In the LG IIa period, a pictorial scene became popular, which is usually called 'rattle scene'. This scene is known of 12 pitchers (no. 3 included) and one giant oinochoe, which date from LG IIa, except for two LG IIb pieces. B. Borell attributed with good reasoning two low skyphoi to Painter B of the Rattle Group, one of which was formerly ascribed to the Birdseed Workshop<sup>154</sup>. It is remarkable that no. 3 (Fig. 11) of the Lambros Group was not listed in Coldstream's 'Rattle Group', although it belongs to it, as T. Rombos showed<sup>155</sup>.

The subject was rediscussed only recently by E. Rystedt<sup>156</sup>, who postulated a musical session, taking place indoors. The square and chequered objects, sometimes found between the figures, would represent a carpet. Earlier, J. N. Coldstream placed the theme of the seated figures with the 'rattles' in the funeral sphere, suggesting that it could represent a musical session after the funeral. He

interpreted the square object as the grave itself<sup>157</sup>. This interpretation does not seem to hold for the object on the rattle scene on the Lambros pitcher no. 3 (Fig. 11), although T. Rombos suggested that the cauldron could well be a bronze cremation cauldron<sup>158</sup>. Also the discussion of the gender of the depicted persons is not concluded yet; W. Hahland considered the two seated figures on no. 3 (Fig. 11) to be females<sup>159</sup>. But, no matter what solution will turn out to be correct, or whatever pictorial meaning they may be given in Attic Geometric vase painting, this pictorial scene ultimately derives from Near Eastern art.

As early as 1967, the motive was seen by G. Ahlberg as being taken over from North Syrian monumental art<sup>160</sup>, citing some parallels. How the transference would have taken place from this monumental art into media of other *Kulturlandschaften*, remains as unclear as in the case of the pictorial programme of the slaying of captured enemies. The transference could well have been aided by the oriental bronze- and silver bowls. These often displayed such notorious pictorial scenes as isolated emblems, taken from their original contexts, reproduced in another, thus giving them another meaning. This is a characteristic of Phoenician art.

Bowls of this type were known in Attica, as the famous example from Kerameikos Grave 42 shows<sup>161</sup>. A bowl from Olympia (Fig. 51) depicts the mentioned scenery representing a figure, seated on a high-backed chair, opposite of an offering table with votives. Both this figure and its standing counterpart hold objects in their hands (cup, lotus-flower

<sup>148</sup> Markoe 1985, 45-47.

<sup>149</sup> Rombos 1988, 271-283. See also the additions by Hiller 1992, 240.

<sup>150</sup> e.g. Benson 1970, 30; Crielaard 1990, 4-9.

<sup>151</sup> Rombos 1988, 271.

<sup>152</sup> Rombos (1988, 273) lists some examples. See Schweizer (1969, 55) and Hiller (1992, 238, 240), who stress the Late Bronze Age, Mycenaean predecessors. In Greece, mention may be made of the small Geometric bronze disk from Tegea, which shows, apart from the swastika on one side, also a 'Mistress of the Animals'. She seems to be represented half naked (!) and stands on a horse, Schweitzer 1969, 189 fig. 105.

<sup>153</sup> Rombos 1988, 280, probably taking over the argument from Schweizer (1969, 55).

<sup>154</sup> Borell 1978, 42-43 with n. 56.

<sup>155</sup> Coldstream 1968, 71-72; Rombos 1988, 284-285, 293-295, 480 cat. 253.

<sup>156</sup> Rystedt 1992.

<sup>157</sup> Coldstream 1977, 122-121.

<sup>158</sup> Rombos 1988, 295.

<sup>159</sup> Hahland 1954, 178-179.

<sup>160</sup> Ahlberg 1967, 185.

<sup>161</sup> Markoe 1985, 313-314 cat. G1.

and fly-whisk), which might easily be mistaken by an artist with a different cultural background, as rattles or even pomegranates. It is to be noted, that the throne on the Olympia bowl has a thickened and bent back, which was taken over almost identically in some of the rattle scenes (*Fig. 11*)<sup>162</sup>. The characteristic – Phoenician – transference of isolated scenes from one medium into another is, in the case of the rattle scenes, attested for an Attic context.

#### OTHER ORIENTAL LINKS BETWEEN ATTICA AND THE EAST

Although the vases of the Lambros Group consist of a considerable number of characteristics, which show a dependence on Cypriot and East-Mediterranean art, there remains a number of aspects of contemporary Attic art, which are not represented within the group. These deserve a short discussion, since they widen our picture of the Attic LG (pottery) repertoire and may contribute to an understanding of the rather sudden floruit of oriental phenomena in Attica. The following selection constitutes a compilation of some case-studies on different aspects of Attic Late Geometric art, starting from the useful lists of B. Borell and T. Rombos<sup>163</sup>:

1: The concept of Attic low skyphoi with interior decoration<sup>164</sup>. The idea is taken up in Attica at the beginning of LG IIa and is inspired by the oriental metal bowls.

2: The concept of the plate, which is introduced in the Attic repertoire of common shapes, precisely within the LG Ib period<sup>165</sup>. It is not unlikely, that this shape was introduced from the Levant or Cyprus, where plates and shallow bowls have a long history and belong to standard eating and drinking service.

3: The development of a narrative figure style in Attic Geometric vase painting, which remains, however a highly debated topic<sup>166</sup>. See also the remarks on the Rattle Group above.

4: The depiction of oxes in Attic vase painting<sup>167</sup>.

5: The depiction of lions and lion combats in Attic vase painting in LG II, which was probably taken over from representations on Attic goldbands, which ultimately go back to oriental models<sup>168</sup>.

6: The depiction of panthers in Attic vase painting<sup>169</sup>.

7: The depiction of mythological/fantastic/composite animals like sphinxes and winged goats in Attic vase painting<sup>170</sup>.

8: The depiction of regardant goats or stags, introduced in Attica in the LG Ia period<sup>171</sup>. In the papers of a recent meeting on 'Greece between East and West. 10th – 8th Centuries B.C.' the editors depicted on the frontispiece a fullcolour detail of amphora Athens NM 804, highlighting this motif and subtitling it – provokingly – "*Neck of the Phoenicianizing amphora, Athens, National Museum, inv. 804*"<sup>172</sup>.

9: The scene of a female round dance in front of a seated figure. The earliest representation in Attica is found on the interior of the low skyphos Athens 784, dating to LG IIb<sup>173</sup>. It is generally interpreted as "(...) a free-hand rendering of the well-known oriental subject of a musical procession towards a seated figure (...)", in this case, probably inspired by models made in Cyprus, be it by Phoenicians or Cypriots<sup>174</sup>.

10: The ivory statuettes from Dipylon Grave 13, dating to around 730 B.C., which were probably made in Attica under strong oriental, perhaps North-Syrian, influence<sup>175</sup>.

11: The use of added white paint in Attic LG and Corinthian pottery, first discussed in 1939 by R. S.

<sup>162</sup> Cf. Rombos 1988, pl. 74d, g. See also n. 13, above.

<sup>163</sup> Borell 1978, 90-92, considering Greece. Rombos 1988, in the respective parts of her book. Two reviews of the monography of T. Rombos have come to our attention, which give useful additions to the discussion of the various 'themes' listed by Rombos: Sheedy 1990 and Hiller 1992.

<sup>164</sup> Borell 1978, esp. 38-39, 93-94. In addition to the examples listed in B. Borell's monography on this subject, mention should be made of an example from the A. H. Bullock Collection, now in the Worcester Art Museum (Inv. 1955.54).

<sup>165</sup> Coldstream 1968, 49.

<sup>166</sup> A.o. Hemelrijk 1966; Schweitzer 1969, 58-59; Fittschen 1969; Carter 1972; Borell 1978, 91; Ahlberg-Cornell 1992; Rystedt 1992.

<sup>167</sup> Borell 1978, 55-58, 91; Rombos 1988, 226-231.

<sup>168</sup> Müller 1978, 12-30, 36-37; Borell 1978, 58-60, 91.

<sup>169</sup> Müller 1978, 36 with n. 133; Borell 1978, 61, 91.

<sup>170</sup> Müller 1978, 35; Borell 1978, 61-62, 92; Rombos 1988, 232-258, with the additions in Hiller 1992, 240. The centaur was considered to have a Greek origin. On sphinxes, also Kourou 1985, 417-418; Markoe 1985, 34-36. On griffins: Markoe 1985, 36-38.

<sup>171</sup> Young 1939, 217; Amandry 1965; Rombos 1988, regardant goat: 38-43 with table 2, type A; regardant deer: 53-58 with table 6.

<sup>172</sup> G. Kopcke and I. Tokumaru eds., Mainz 1992. See also the preface by G. Kopcke, p. IX.

<sup>173</sup> Kourou 1985; Rombos 1988, 344-351; Borell 1978, 8, cat. 24; Coldstream 1968, 60.

<sup>174</sup> Kourou 1985, 415-417.

<sup>175</sup> Homolle 1891, 441-442; Perrot 1895; Kunze 1930, pls. 5-8 Beil. 40-41; Hanfmann 1962, 237; Borell 1978, 90-91.



Young, tracing its origin in the East<sup>176</sup>. Since this idea was never taken up again, it deserves to be discussed at some length, introducing the probable oriental models.

In Corinthian LG pottery a small group of vases, aryballoi and oinochoai, can be set apart, decorated with four sets of compass-drawn concentric circles in added white on black or reddish glaze<sup>177</sup>. This added 'white' paint, in fact, is a fine solution of the local Corinthian yellow clay, as J. N. Coldstream observed<sup>178</sup>. Small circles in added white were introduced earlier in Corinthian pottery at the transition to LG, but remained rare<sup>179</sup>. With regard to the origin of the idea of added colour, R. S. Young considers it to be "(...) one of the devices brought from the east in the second half of the eighth century (...)"<sup>180</sup>. It is remarkable that 'additional white' was used in Attica and Corinth for orientaling motifs, as the snake and the concentric circles.

Regardless of the questions, when and why the use of 'additional white' became favoured by Greek painters, this decoration was carried out in Phoenicia as early as the tenth and early ninth century B.C. 'Additional white' was merely part of an oriental decoration: either the surface was treated in Bichrome technique, which is a red and black paint on plain surface, or in polished Red Slip-technique and painted black<sup>181</sup>. In both cases the use of 'additional white' occurred, either as a third colour on plain surface, or replacing the red bands on red slipped surface. It was restricted to closed vessels of the Phoenician Bichrome tradition: to spherical neck-ridge jugs with vertical concentric-circle decoration<sup>182</sup>. In Cyprus this 'additional white' was used in Bichrome Red I and II (750-475) Wares for the same purpose, to brighten up the darker surface and the black paint<sup>183</sup>. It is not unlikely, then, that the idea of adding colour to the decoration was another innovation taken over in the Greek repertoire of painting techniques from Cypriot models.

12: The motif of double axes, which might ultimately be of Cypriot inspiration, as V. Karageorghis argued<sup>184</sup>. In Attic pottery it is first found as a filling ornament on works of the Dipylon Master (LG Ia) and, still later, on oinochoai of the Concentric Circle Group (CCG 18 and clearer CCG 21, see above), which probably date to LG IIa<sup>185</sup>. The motif, used as a symbol of authority, is usually thought to be of Euboean and Boeotian inspiration, finding its earliest representation in works of the Cesnola Painter<sup>186</sup>.

This brings the discussion to another source of inspiration for the Attic painters and artists of the LG (II) period, namely Euboea, which may be held responsible for the dispersion of many oriental details<sup>187</sup>.

It is remarkable in this connection that, in one respect, it took rather long to come out of the Dark Ages. In Attica the lamp was introduced as late as the early seventh century, probably under influence of, again, Cyprus. The earliest lamps in Attica, said to be made locally, are of the Cypriot/Phoenician type<sup>188</sup>. This type persisted for quite some time as the lamps from an Athenian well, dating to the third quarter of the seventh century or slightly later, testify<sup>189</sup>.

<sup>176</sup> Young 1939, 197: "(...) white was first used both at Athens and in Corinth at the end of the eighth century for the drawing or adornment of snakes (...)". He referred to Corinth in connection with the krater Corinth T 2545, which is probably Argive (see n. 142).

<sup>177</sup> Blegen, Palmer and Young 1964, 33. 48-49, pls. 9,40-1; Neef 1987, 26: aryballos (Corinth T 2230), remarkably white on red (!), which according to C. Morgan might be caused intentionally during firing. Some doubts were raised on the Corinthian origin of the piece, Blegen, Palmer and Young 1964, 48. Fragments of an oinochoe, Robertson 1948, 34, pl. 8,135; another example comes from Isthmia and is still unpublished. We thank C. Morgan for this information and her kind permission to mention the piece.

<sup>178</sup> Coldstream 1968, 97.

<sup>179</sup> Coldstream 1968, 97 pl. 18f: a Corinthian proto-kotyle from Thera. Later, in the first quarter of the seventh century, one group of Corinthian aryballoi was decorated – in black – with rows of concentric circles on the body, Neef 1987, 72, 73 n. 221, 74 fig. 18,320.

<sup>180</sup> Young 1939, 197.

<sup>181</sup> Since S. V. Chapman's catalogue has been presented, the misleading name 'Local Black-on-Red ware' is occasionally used for the latter technique (Chapman 1972, 57). It must be emphasized that this ware has nothing in common with the Cypriot 'Black-on-Red' ware, applied by Gjerstad 1948, 68-73, and thus should be avoided; cf. Culican 1982, 55-60.

<sup>182</sup> Briese 1985, Type 1: fig. 10,2 (Tell Keisan). 13,1 (Tell Masos). 17,1 (Tell Qasile).

<sup>183</sup> e.g. Gjerstad 1948, 73 figs. 41-42, and the juglet from the T. N. Zintilis collection (Fig. 46), cf. n. 127, above.

<sup>184</sup> Karageorghis 1975, 172-173; Reeder Williams 1984, 133. See also Kübler 1954, 41 with n. 95; Benson 1970, 23.

<sup>185</sup> Kahane 1973, 126-129.

<sup>186</sup> Kahane 1973, 126-132. Rombos 1988, 161-184, esp. 261-265; Hiller 1992, 239, on the combination of horses (riders) and double-axes, the latter with additional references. Now also Crielaard 1990, 4-9.

<sup>187</sup> Especially in the example of the motif of animals, heraldically confronting a tree, this seems to have been the case, as T. Rombos was able to show. Ultimately it is derived from the oriental 'Tree of Life' motif, Rombos 1988, 41-43, 187, 235-236. See also the critical remarks of Sheedy 1990, 419. Earlier: Schweitzer 1918, 149-150 and Kahane 1973, 118-126.

<sup>188</sup> Scheibler 1976, 13.

<sup>189</sup> Young 1938, 419-420, fig. 8 (D28, D29).

In the case of the imports within Attica of the LG period, we again base ourselves on the list of B. Borell, who, however, treated the whole Greek area and used some wider chronological margins<sup>190</sup>:

1: Metal bowls with frontal sphinx heads from the Kerameikos, like the ones from Kerameikos Grave 62 and 74, which date to the early seventh century, according to the latest material in the tombs. They are certainly older (eighth century) and probably came in the grave as heirlooms<sup>191</sup>.

2: A Cypriot bronze tripod stand from a LG Ib grave in the Pnyx area<sup>192</sup>. Like the above mentioned metal bowls, this tripod stand is a heirloom, and probably dates back to the Late Bronze Age.

3: Two 'Lyreplayer' seals were found at Sounion<sup>193</sup>.

4: A Phoenician seal, said to be found in a LG Ib grave, "southeast of Athens" in a skyphos, which is, remarkably, an exact parallel for the Lambros skyphos no. 16 (*Fig. 36*)<sup>194</sup>. Both pieces come from the Robinson collection.

5: In the so-called 'Ivory grave', Dipylon Grave 13, dating to around 730 B.C., apart from seven vases, the six ivories and some bone objects, also three imported lions of Egyptian (?) faïence were found<sup>195</sup>.

More impressive oriental imports into Attica are to be found earlier in the Geometric period, like the gold earring pendants, possibly of Cypriot origin, in mid-ninth century Athenian graves<sup>196</sup>. Both in the imports and in the other categories of grave goods, which in the EG and MG periods marked the status of Attic aristocratic burials, a decline becomes clear in the LG period<sup>197</sup>.

#### ATTIC IMPORTS IN CYPRUS AND THE NEAR EAST

The subject of Attic imports in Cyprus and the Near East was discussed on several occasions by J. N. Coldstream<sup>198</sup>, who could show, that the main influx took place in the MG II period, in the early eighth century, and was confined to pottery exchange, evidently taking place on a high aristocratic level:

- An Athenian MG II pedestalled krater from the Royal Tomb I at Salamis, the earlier of the two burials (cremation in bronze cauldron). Further

20 Attic skyphoi of the same date, forming an homogeneous group. Apart from that, 12 pendent semicircle vessels, two skyphoi and ten plates, had been imported from the Northern Cyclades. These belong to a male cremation, but not necessarily one of a foreigner<sup>199</sup>.

- A very similar second MG II krater from a rich tomb in the kingdom of Amathus.
- Fragments of a third MG II krater from Samaria, the Royal Israelite Capital.
- Part of a foot, from similar MG II krater from Tyre.
- Pieces of a fifth MG II krater in the Royal quarter of Hamath on the Orontes (Hama).
- Fragment of a sixth MG II krater comes from Huelva (Spain).
- Three Attic MG II skyphoi from Amathus, perhaps slightly earlier than the set of twenty skyphoi from Salamis, mentioned above<sup>200</sup>.

Of the above examples, those from Hamath, Samaria and Huelva possibly came via the Phoenician metropolis of Tyre.

Imports of the kind described above, from Attica into Cyprus and the Near East, ceased after the MG period, which reflects the general distribution pattern of Attic pottery at that time. J. N. Coldstream

<sup>190</sup> Borell 1978, 88-89. The small bronze Levantine statuette of the Reshef type from the bothros of the Poseidon sanctuary at Sounion, that she included in her list of imports is, however, seventh century in date. In the bothros also other Oriental trinkets were found, like the Egyptian scarabs of the second half of the century. They clearly belong to another period of Attic – Levantine connections, Hanfmann 1962.

<sup>191</sup> Kübler 1970, 396-402 pls. 123-125. They were considered by some to be local imitations, see Borell 1978, 90 with references. For a concise and recent summary of the problem of the import of these bowls in Attica and in Central Italy reference may be made to Waarsenburg (forthcoming).

<sup>192</sup> Coldstream 1968, 46; Whitley 1991, 161 with references.

<sup>193</sup> Boardman and Buchner 1966, 23, 28, 62; see also n. 190 above.

<sup>194</sup> Robinson 1949, 310-311 pl. 40,7. 7a; Coldstream 1968, 46. On the skyphos, see above Lambros no. 16.

<sup>195</sup> Perrot 1895, 275.

<sup>196</sup> Snodgrass 1971, 333 with references.

<sup>197</sup> Whitley 1991, 183; Coldstream 1977, 132-135. Unquestionably, the gold used for the Attic gold diadems was still being imported, but its source remains unclear. Coldstream (1977, 130) pleads for a Near Eastern provenance: "Ivory, like gold, was supplied to Attica from the Near East, and work in both media tended to flourish when eastward contacts were most frequent".

<sup>198</sup> Coldstream 1983, 203; Coldstream 1987, 26-27.

<sup>199</sup> Coldstream 1983, 201-202, with n. 1 vs. E. Gjerstad, who proposed the burial to belong to an Athenian aristocratic bride married to a Cypriot ruler (part of her dowry). V. R. d'A. Desborough suggested gift exchange.

<sup>200</sup> Coldstream 1987, 26-27, pls. 9,14.16. 14,14-16; Lemos and Hatcher 1991, 200, 203 figs. 14-16.

explained this by the sudden florescence of the figured style in the hands of the Dipylon Master and his colleagues from 760 B.C. onwards. The vessels now became too large to be useful in daily life. Their function was reduced to aristocratic grave monuments. Thus, they were covered with images of death and battle<sup>201</sup>. Thereafter, only Euboean pottery, which remained serviceable in a domestic context, was exported abroad<sup>202</sup>.

## CONCLUSION

The date of the Lambros group, LG Ib – LG Ila, marks a period in which the intense contacts between Attica and Cyprus, after a culmination in the Middle Geometric period, are thought to have declined rapidly<sup>203</sup>. Still in the first part of this transitional period, *i.e.* LG Ib, oriental imports are attested in Attic graves, as may be evident from the inventories of graves pertaining to this period (see above). Thereafter, true oriental imports are scarce in Attica. During this period we see an outburst of oriental shapes, motifs and ideas in the Attic pottery repertoire. This chronological discrepancy between the acme of oriental imports in Attica in the MG period and the first pottery adaptations of these imports in the LG period has been noted before, not the least by H. G. Niemeyer in 1983. Regarding the phenomenon of adaptation, he stated in his Theodor Mommsen Lecture, that “(...) *der geschilderte Vorgang wenigstens in Athen erst rund 80 Jahre später einsetzt als jene frühen orientalischen Importe in der Nekropole am Kerameikos und von anderen Fundstellen datiert werden müssen. Erst nach geraumer Zeit also sind Auswirkungen auf das Bildrepertoire des lokalen Kunsthandwerks zu beobachten. Und gleich in dieser ersten Phase verstanden sich die attischen Gefäßmaler bereits hervorragend darauf, die neuen figürlichen Bildelemente in ihre angestammte Formensprache zu übersetzen*”<sup>204</sup>.

To the very period, to which most of the oriental imports in Attica were confined – the MG period – the export of Attic pottery to Cyprus and the Near East was confined as well. By such we are faced with a dwindling import and export of goods by the LG period. Besides, it was shown, that both the Attic exports to Cyprus and the Near East and the oriental imports into Attica were found in graves of some wealth. Apparently, these goods circulated amongst the well-to-do classes; a type of exchange, which J. N. Coldstream (1983b) rightly has explained as gift exchange amongst the ‘international’ aristocracies.

The chronological problem, described above, may be solved by making a small excursion to more elementary questions. Why this ‘exchange of goods’ was retrogressive, and, if exchange and the Levantine connection really began to lapse at all? Is the often cited dwindling of Athenian maritime enterprise and the ‘fact’ that “(...) *such a reverse might have hastened the rise of landed aristocrats, who established themselves securely in the most fertile land of Attica, and grew richer on its fruits* (...)”<sup>205</sup>, in the end nothing but an archaeological interpretation of the disappearance of one type of exchange, as witnessed in the graves of the participants of exactly this kind of exchange, the aristocracy? Perhaps, a division should be made between the ‘exchange of gifts’ on the one hand, gifts, being strange, unique and valuable because of their exotic connotations, and an ‘exchange of trade goods’ in quantities or even in bulk, on the other. The latter type of exchange became established at a time when gift exchange apparently was no longer the appropriate way of doing business, while trade routes had settled and traders of different nationalities became involved, in particular Euboeans, Phoenicians and Corinthians<sup>206</sup>.

A similar division into two different patterns of trade, with similar chronological implications, was reached by J. Latacz in a recent discussion of the literary evidence for Phoenicians in Homer. In the earliest of the two books, the Iliad, Phoenicians are described as *Sidones (polydaidaloi)*, being equal partners in ‘gift-exchange relations’, as well as the producers of exotic ‘keimelia’. In the Odyssey, though, Phoenicians occur as *Phoinikes*, characterized in a rather negative way. “‘*Fliegende Händler*’ sind dem seßhaften Bauern – damals wie in späteren Gesellschaften – stets ein Dorn im Auge”<sup>207</sup>.

It is generally accepted, that in the LG period many Athenians made their living by agriculture, as being indicated by an increase of settlements and necropoleis in the Attic countryside<sup>208</sup>. In the later part of this period, a transport container was introduced, the so-called ‘SOS’-amphora, which hints to the extent of the Attic agricultural production of

<sup>201</sup> Coldstream 1983, 205.

<sup>202</sup> Coldstream 1983, 205-206.

<sup>203</sup> Coldstream 1977, 132-135.

<sup>204</sup> Niemeyer 1984, 64-67.

<sup>205</sup> Coldstream 1977, 133, 135.

<sup>206</sup> At the same time, the disappearance of this type of grave goods may have been affected by the adoption of other means of expressing the symbolic order in society, Morris 1987, 143.

<sup>207</sup> Latacz 1990, 21.

<sup>208</sup> Coldstream 1977, 134-135.



that time. A considerable surplus was now being traded to overseas markets, as the distribution of this class of amphorae, from the LG period onwards, shows<sup>209</sup>. Apparently, the trade of agricultural products – mainly oil, but also wine – reflects the oncoming, above-mentioned type of exchange.

Thus, the chronological discrepancy between the acme of ‘aristocratic’ imports in the MG period and the apparent orientalizing character of the pottery style in the LG period may be considered non-existent. Exchange relationships with the East and Cyprus had not been given up, but just served different ends. In a way, exchange-relations became popularized. Thereby, specific oriental shapes and decorative systems became favoured and gained wider popularity<sup>210</sup>. In the case of Attica, it can be noticed that there was a marked preference for jugs. As many examples within the Lambros Group show, the separate features of these jugs may be traced to oriental prototypes. It is obvious, that the influence of the Cypriot prototypes was experienced directly, since the jugs, the sieve-vessel as well as the pomegranate of the group show no interference with other oriental pottery centres. In the case of the Phoenician prototypes, the Greek potter apparently took over their orientalizing features as worked out by Cypriot craftsmanship, having no idea of the Phoenician origins at all.

The oriental motifs within Attic LG pottery – and especially embedded in the unique composition of the Lambros Group, with an unparalleled amount of vases of oriental inspiration – were explained in 1918 by B. Schweitzer as the result of direct or indirect Cypriot influence in Attica<sup>211</sup>. 75 years after this first discussion of the Lambros Group, the oriental influence on Attic pottery may still be considered to be mainly Cypriot in origin, incorporating some Phoenician elements, which already had become native to the Cypriot repertoire. It was only in the LG period, at a time, when the motivation for importing samples from the East had changed, that the Attic potters and painters gave way to the influence of a choice of models from the East.

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<sup>209</sup> Johnston and Jones 1978. On the contents of ‘SOS’-amphorae, Docter 1991.

<sup>210</sup> In Cyprus, a comparable phenomenon can be seen in the preference for the specific decorative element of birds on skyphoi, Coldstream 1979, 261 with n. 3. On the social implications of the popularization of particular stylistic elements, see Morris 1987, 16-17.

<sup>211</sup> See the quotation in the introduction and n. 4.

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#### ADDENDUM

Since the manuscript was finished a further reference to Lambros Skyphos no. 18 (*Fig. 38*) has come to our notice: Lehner, M., T. Lorenz und G. Schwarz, *Griechische und italische Vasen aus der Sammlung des Instituts für Klassische Archäologie der Karl-Franzens-Universität Graz*, Graz 1993, 18.

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# Early Etruscan Stone Sculpture

## Reconstruction and petrography of sphinxes from Veii

Patricia S. Lulof and Henk Kars

### INTRODUCTION

In Etruria, stone sculpture is relatively rare, the reason being in part a lack of suitable material (the Carrara quarries were not exploited until the mid first century B.C.). The city of Vulci was an exception, at least in the Archaic period; some 60 pieces are known from this town. Fabulous creatures such as sphinxes, centaurs, winged lions or *Meermischwesen* were placed at the entrances of tombs as guardians of the dead. The types of these tomb-guardians vary greatly, both in style and in chronology. The production of this type of tomb sculpture started around the beginning of the 7th century and continued until the end of the 6th. Around 520 the production ceased without no apparent reason. In the early period the monumental stone sculpture was strongly influenced by the Daedalic style. Small plastic figurines, such as ivories from the East, set examples for the Etruscan sculpture. Later, in the 6th century, especially between 570-530 B.C. the sculptural style changed under the influence from the Greek artists from Ionia<sup>1</sup>.

Recently, the Allard Pierson Museum in Amsterdam added a head of a stone sphinx to its collection of Etruscan Art and received four other fragments of stone sphinxes on loan, said to have been found at the same location as the head. This suggested that all pieces could derive from the same sphinx. The reconstruction of the pieces into a complete sphinx, however, though challenging, proved to be difficult on stylistic and chronological criteria alone. A closer examination of the raw material was needed. Here a co-operation between the disciplines of the authors shed some light on the reconstruction of the sculptures. We hoped that petrography could be of some help to attribute separate fragments to one or more sculptures, thus solving an archaeological problem.

Scientific examination of this sort of material is not carried out very often. Attention is mostly concentrated on building materials or the quarries and provenances<sup>2</sup>.

This article deals primarily with the publication of these five fragments of large tuff sculptures of 6th century tomb guardians in the shape of squatting sphinxes, which are said to have been recovered in

Veii. It focuses on two aspects: first, the archaeological classification and chronology of the sculptures and, second, the reconstruction of the sculptures based on petrographical tests. Additionally, some attention is given to the description of the material and its provenance. Finally, this study may demonstrate that petrographical research can be used to implement archaeological studies.

\* For helpful criticism and the reading of the manuscript, we are grateful to Professor H.A.G. Brijder; he reacted enthusiastically at the suggestion to analyze the material of the fragments. We owe our debts of thanks to the private collector who so kindly gave the permission to publish the sphinx head and the accompanying fragments. R. van Beek, curator at the Allard Pierson Museum, helped us through the first stages of study. J. van den Berg and R. Leenheer, also Allard Pierson Museum, were of much help during the preparation of the technical analysis. Thanks are due to the Institute of Earth Sciences, Free University of Amsterdam, for preparing the thin sections. We are most indebted to the *Allard Pierson Stichting* Amsterdam, for providing the funds in order to carry out the petrographical analysis. Illustrations: *Figs. 1a-d*: Allard Pierson Museum Amsterdam; *Figs. 2-5, 13-14, 15a-b*: photographs and drawings by P.S. Lulof; *Fig. 6*: Photo Moscioni, after *Etrusken* 1990, fig. 64; *Fig. 7*: Museum Jeruzalem, after Jucker, no. 386; *Fig. 8*: Villa Giulia Museum, Rome, after Sprenger 1977, no. 60; *Fig. 9*: Villa Giulia Museum, Rome, after Hus 1977, pl. XIII.c; *Fig. 10*: Villa Giulia Museum, Rome, after Hus 1961, pl. XXXIX.1; *Figs. 11-12*: *Rijksdienst voor het Oudheidkundig Bodemonderzoek*, Amersfoort. The head of the sphinx was first mentioned by H.E. Frenkel in: *Acquisities, Mededelingenblad Amsterdam* 39 (1987), 21, no. 16 and by H.A.G. Brijder in: *Etrusken* 1990, 78, 213, fig. 66.

<sup>1</sup> G. Schade (ed.), *Die Welt der Etrusker* (Catalogue Berlin 1988), 209-211. The most important publication on Etruscan stone sculpture is by A. Hus, *Recherches sur la statuaire en pierre étrusque archaïque*, Paris 1961; in 1977, *La statuaire en pierre archaïque de Vulci, Atti del X convegno di studi etruschi e italici* 1975, 31-47, he added more examples to his list of 1961. New examples have come to light since his study: W. Hornbostel, *JbKuGewHamb* 2 (1983), 189-192; H.A.G. Brijder, *Two Etruscan Centaurs?* *BaBesch* 59 (1984), 113-119, esp. n. 5; Jucker (1991), no. 386 with bibliographical references.

<sup>2</sup> Petrography has been used as a method to solve archaeological problems before. They mostly centre on the petrographical analysis of architectural terracottas in order to control stylistic classifications and typologies: H. Kars, J.G. Moltzer, R.R. Knoop, *Petrography of Archaic Antefixes from Satricum*, *BaBesch* 62, 1987, 57-65; R.D. McDonnell, P.S. Lulof, H. Kars, *A Petrological and Geochemical Study of the Late Archaic Ridge-pole Statues from Satricum*, *BerROB* 41, 1994, 1-20. As for the technique of Etruscan stone sculpture is concerned, very little literature exists.



*Fig. 1a. Head of sphinx, APM 11.877, three-quarter view on left profile*



*Fig. 1b. Head of sphinx, APM 11.877, front view*



*Fig. 1c. Head of sphinx, APM 11.877, right profile*



*Fig. 1d. Head of sphinx, APM 11.877, back view*



## DESCRIPTION

### *Head of a sphinx.*

Allard Pierson Museum Amsterdam Inv.no. 11.877 (Figs. 1a-d). Pres. H. 26.0; W. 17.0; D. 27.0; H. face 16.0; mouth 7.0, eyes 5.5. Greyish cream tuff with blackish and ferrous lumps and pumices. Porous. Cut off at the nape of the neck, where the lower part of the hair falls onto the shoulders. Nose missing, lips, chin and ears chipped. Edges of anatomical details battered. Breakage in top of skull. Surface overall rather well preserved. Small drill-holes under both ears and at the temples. On loan since 1989. Provenance Veii.

The life-size head is egg-shaped. The sides of the face are remarkably flat and the top of the head is almost level. The face is narrow with close-set, almond-shaped eyes, which are slanting upwards, the eyeballs bulging. Although no eyelids are indicated, the eyes are well sunk into the sockets. The forehead is rather low and strongly receding; the brows are prominent with no details indicated. According to the break of the missing nose, it once was broad and triangular; the apex is placed high on the forehead between the eyes. The cheekbones are placed high; a deep line, running from nose to corners of mouth, emphasize the cheeks. The mouth has fleshy, straight lips and a rather sulking expression. The chin is round, thick and changes into a fleshy neck. A substantial cap of hair is held by a molded ribbon running around the skull, separating forehead and hair. On top, the hair runs smoothly over the skull, parting in the middle. At the back, the hair is divided into thick strands: a broad one in the middle and two thinner ones at the sides, leaving the ears free. At the temples no hair is indicated, but small holes at both sides of the head may have served as fixing-points for a diadem. The ears are very large and placed high, close to the skull. The lobe is broad and circular, and forms a rather flat knob with a depression in the centre. Under both ears small drill-holes are preserved for earrings or ornamental discs. The ears are shaped as S-curves and simple in design; anatomical details are indicated through flat, rough ridges and rather well-understood, *helix* and *tragus* are indicated.

### *Four fragments of life-size feline bodies.*

Allard Pierson Museum Amsterdam. B 13.243-13.246 (Figs. 2-5). (B 13.243) Pres. H. 43.0; W. from back to front 34.0; W. across hindlegs 29.0. (B 13.244) Pres. L. 31.0; W. 28.0; Diam. 28.0 x 19.0 and 23.0 x 17.0. (B 13.245) Pres. L. 36.0; W. 33.0; Th. base 10.0; W. scar: 18.0. (B 13.246) Pres. L. 15.5; W. 17.0; Th. base 10.0; W. paw 9.0, H. paw 9.0. Greyish cream tuff with blackish and ferrous lumps and pumices. Porous. Private collection Amsterdam. On loan since 1991. Provenance Veii.

(B 13.243) Fragment of a feline body; rear of body with upper part of hindlegs. Cut off where rear emerges into torso and below lower part of the hind legs where they are fixed to the base (a small part of which is still preserved). The surface battered with some damage to the anatomy. The feline once was presented squatting, sitting down on his hindlegs. The spine runs along the back and rear, forming a sharp edge. The haunches of the animal are shaped as fleshy triangles with arching tops, outstanding from the trunk. The left leg is placed higher and is more protruding. The feline seems to sit on its tail, which is tucked under the rear end, reappearing between the hindleg and the left side of the trunk; here a small part of the tail is preserved. The right side of the animal is flattened. The skin is smooth. The animal retains a stiff and formal pose.

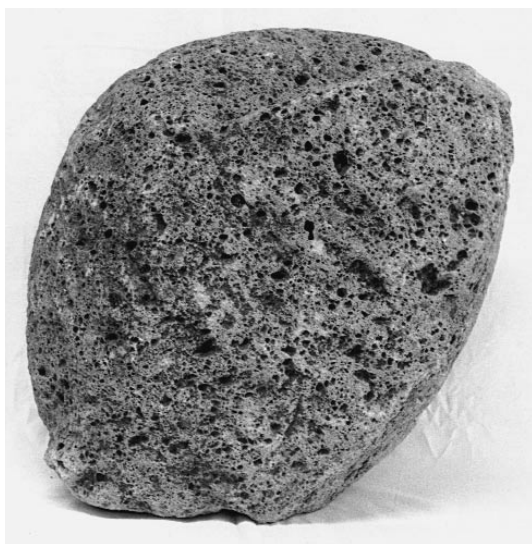
(B 13.244) Fragment of a feline trunk. Cut off at the chest behind the front legs (scar remains) and where back emerges into rear. Surface battered. Trunk is oval in section, strongly tapering towards the rear. The belly is rather smooth, no ribs nor muscles are indicated. The backbone runs along the back in a sharp edge.

(B 13.245) Fragment of a base with the scar of two feline paws. Paws broken off irregularly, leaving a clear scar and a thin ridge. Right front corner of base missing. Surface damaged and battered. Only front part of narrow and rectangular base preserved. Base is thick with bevelled edges. The left front corner is intact, thus indicating the position of the base. The scar shows us the position of the paws. Both paws, possibly front paws, are placed closely together, slightly reaching over the front edge of the base.

(B 13.246) Fragment of a base with one feline paw. Right leg broken off just above paw. Left paw missing, leaving a thin scar. Surface battered. Only right front corner of base as (B 13.245) preserved. Right paw placed stiffly next to the edges of base. Toes shaped as coarse ridges, separated by deep grooves, reaching over the front edge of the base. The paws were once placed closely together as in (B 13.245), separated by a furrow. The carving is crude and angular. There is no indication of bones and muscles.

## STYLE AND CHRONOLOGY

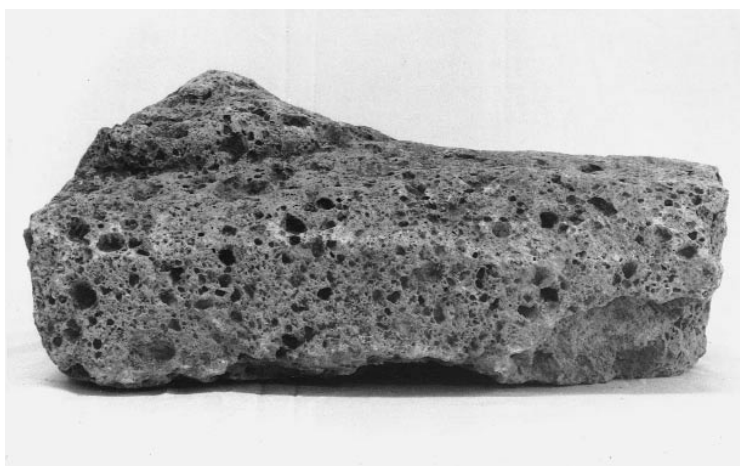
Facial features are generally regarded as an important aid in stylistic assessment. The most outstanding feature of our head is the inconsistency between a thin, long face and the flat planes of the profile. It is as if the sculpture was made out of two



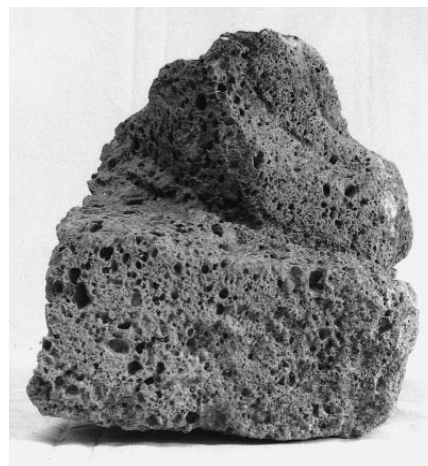
*Fig. 2. Fragment of feline body, APM B 13.243*



*Fig. 3. Fragment of feline trunk, APM B 13.244*



*Fig. 4. Fragment of base with scar of feline paws, APM B 13.245*



*Fig. 5. Fragment of base with feline paw, APM B 13.246*

reliefs put together. The position of the enormous slanting eyes and the long nose gives the head a monstrous expression. Since a beard is not indicated, the head must belong to a female creature, most probably a sphinx. There are no differences between the left and right side of the head and there is no twist in the neck, so it is not very likely the head was turned either left or right. Besides, no dowel to attach the head was used – a technical detail which occurs only with sphinxes where the head is turned<sup>3</sup>. However, the break of the neck and hair indicates that the hair once fell on an arched

back. Hence, we are fairly certain that the body underneath was feline. Furthermore, the discovery of four pieces of felines at the same place (see below) gives us reason to believe that the head once belonged to a sphinx.

Representations of sphinxes came to Etruria in the 7th century B.C. through commerce with the East. The monumental tomb-sculpture was probably inspired by Oriental and East Greek small

<sup>3</sup> K.A. Sheedy, *An Archaic Sphinx from Siphnos*, *BSA* 83 (1988), 366.

sculptures in bronze and ivory. Sphinxes, like Gorgons, were made according to a certain tradition. Hence, they remained rather old-fashioned in execution and are not easy to date. Fortunately, the rendering of some physiognomical details, such as ears and eyes, sometimes escapes traditional rules and may shed some light on the artistic development of the sculptor, thus reflecting the true style and date of the object.

The style of our head is transitional and shows on one hand some sub-*daedalic* or *orientalizing* traits (the oblong face, the low forehead, the slanting eyes and lacking of the 'archaic smile') and on the other more advanced *archaic*, *Ionian* traits (knowledge of physiognomy and fleshiness). Although the head has clumsy and unnatural features – stemming from the artist's attempt to visualize a creature half-human, half-animal – other anatomical details are remarkably well-understood (the eyes which are sunk into the sockets and the indication of the *tragus*). The face recalls those of the 'forerunners' of Richter's *Korai*<sup>4</sup>, but if we compare our piece with the peculiar terracotta sphinx from Calydon, now in the National Museum at Athens, it has to be of later date<sup>5</sup>.

In Etruria, the earliest sphinxes are in terracotta. The standing *acroteria* from Murlo are unanimously dated in the first quarter of the 6th century. Stratigraphy confirmed this date. Their facial features are modelled in a local style with a strong *daedalic* or *orientalizing* influence, shown in the triangular faces, the bulging eyes, the shell-ears and the thin mouth<sup>6</sup>. Moreover, from Veii three tuff sphinxes are known (*Fig. 6*)<sup>7</sup>. This is very interesting, since we are fairly certain the APM head is from Veii as well. However, when we examine one of the tuff heads from Veii (*Fig. 10*), it has a different artistic quality and is somewhat clumsy and rude in execution, suggesting an earlier date

<sup>4</sup> G.M.A. Richter, *Korai. Greek Archaic Maidens* 1968, 21-22, figs. 45-52.

<sup>5</sup> S. Karouzou, *National Museum Athens*, Athens 1977, no. 17870.

<sup>6</sup> I.E.M. Edlund-Berry, Four Terracotta Heads from Poggio Civitate (Murlo), *OpRom* XVII:3 (1989), 21-32, figs. 12, 20.

<sup>7</sup> M. Cristofani, F. Zevi, La tomba Campana di Veio, *ArchClass* XVII (1965), 1-35, esp. 1-4, pl. IV; see also Hus 1961, 308-312, pl. XXXIX.1. There were at least three heads known to have been found at the Campana tomb at Veii. Unfortunately, their whereabouts are unknown today.



*Fig. 6. Entrance of Campana tomb, Veii, photo Moscioni, end of 19th century*



(600 B.C.). It has a much broader, triangular face than the APM sphinx, although the mouth and the ears bear a strong resemblance and the treatment of the hair seems to be the same. In comparison, our head is remarkably more developed.

Close parallels for our head are difficult to find. As has been said, stone sculpture is altogether rare in Etruria, and the sculptures we know of, are never alike. Our sphinx shares some features with examples from Vulci (*Fig. 7*)<sup>8</sup>, dated around 540 B.C. The most important parallel in stone, albeit not a sphinx, is the hippocamp-rider from Vulci, now in the Villa Giulia (*Fig. 8*). All three share a number of features, such as the eyes, the receding forehead and hairstyle. The style and date of the hippocamp-rider has been an subject of debate as well. However, Hus and Sprenger have argued with success that the sculpture was produced under Ionian influence, and therefore has to be dated around the middle of the 6th century or somewhat later<sup>9</sup>. Hence, the style of the head from the APM is best set between the sphinxes from the Campana tomb (600 B.C.) and the parallels from Vulci which are all dated around the middle of the 6th century. I would like to suggest a date in the second quarter of the 6th century<sup>10</sup>.

The fragments of the feline bodies are said to have been found in Veii, at the same site as the sphinx head<sup>11</sup>. The homogeneity in style confirms this presumption. It is noteworthy that the fragments (B 13.245) and (B 13.246) look very much alike in size and composition: distance between paws and outer edges of the bases are equal in both pieces. The execution is the same as well. The sculptures must have been carved by one artist, at the same time.

Close parallels of felines are many: the execution of feline bodies follows a long tradition. Hence, dating is difficult. The date of the head, however, is not contradicting the style expressed in the fragments of the body and legs of the APM sphinxes. Most of the sphinxes in stone are from Vulci. Of the total of 38 sphinxes, 19 came from Vulci. The fragments of the APM sphinxes can be compared with examples from Vulci, which are from the mid sixth century (*Fig. 9*)<sup>12</sup>.

#### PETROGRAPHY

Additional analysis of the raw material was required, since the question whether the fragments belonged to the same sphinx could not be solved by using stylistic and chronological criteria alone. A mineralogical or chemical technique was needed which could provide the conclusive evidence that

the rock of the sphinx fragments is the same or falls apart into two or more groups. It is emphasized that the interpretation of the results of any kind of scientific analysis to solve this question has its own limitations. Suppose, for instance, that all fragments are made of the same volcanic tuff. In that case the analysis only provides some circumstantial evidence that the fragments can derive from the same sphinx. Only the presence of at least two petrographical distinct varieties of tuff within the studied samples will give us the conclusive evidence that the fragments must derive from more than one sphinx.

It is easily seen that all sphinx fragments are made of a volcanoclastic or pyroclastic rock. Because of the compositional and textural variability which was deduced during a close macroscopic examination of the fragments it was decided to start with a thin section study using the polarising microscope. Of each fragment a core was drilled using a water-cooled hollow drill with a diameter of 2.5 cm (*Fig. 14*). To get some insight into the petrographical variability within the tuff, in one fragment two cores were drilled. After being impregnated with araldite, from each core a specimen was cut for the preparation of a thin section. The thin sections were studied by a ZEISS Standard petrological microscope.

The results of the investigations are summarised in *table 1*.

The rock in all fragments is volcanoclastic in origin. The fabric of the rock is characterised by the presence of mineral grains and tiny rock fragments which are embedded in a strongly porous, cryptocrystalline to amorphous groundmass. In addition to this general characterisation of the rock, a more detailed description can be given which shows that at least two different varieties of fabrics must be present, and, therefore, two groups of raw materials.

The first group comprises the fragment of the head, the fragment of a base with one paw, and the fragment of a base with the scar of two paws (cf. *table 1*). The thin sections of this group are characterised by a mineral fraction composed of large (2 mm across) splintery crystals of sanidine, some

<sup>8</sup> Hus 1977, pl. XIII.c; Jucker 1991, no. 386.

<sup>9</sup> Hus 1955, 126; Sprenger/Bartoloni 1977, no. 60.

<sup>10</sup> Frenkel 1987, 21, dated the head around the middle of the 6th century. Brijder suggested an earlier date (first quarter of the 6th century B.C.), *Etrusken* 1990, 213.

<sup>11</sup> All pieces were acquired in the sixties by the present owner as a group most likely belonging to one sculpture. The information regarding the exact location was supplied by an art dealer from Delft, The Netherlands.

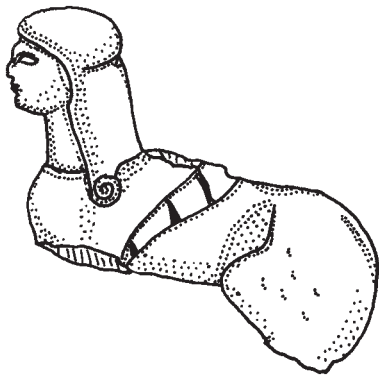
<sup>12</sup> Hus 1977, pl. XIII.c.



*Fig. 7. Head of sphinx, Vulci. Israel Museum Jeruzalem. After Jucker 1991, no. 386*



*Fig. 8. Hippocamp rider, Vulci. Villa Giulia Museum Rome. After Sprenger 1977, no. 60*

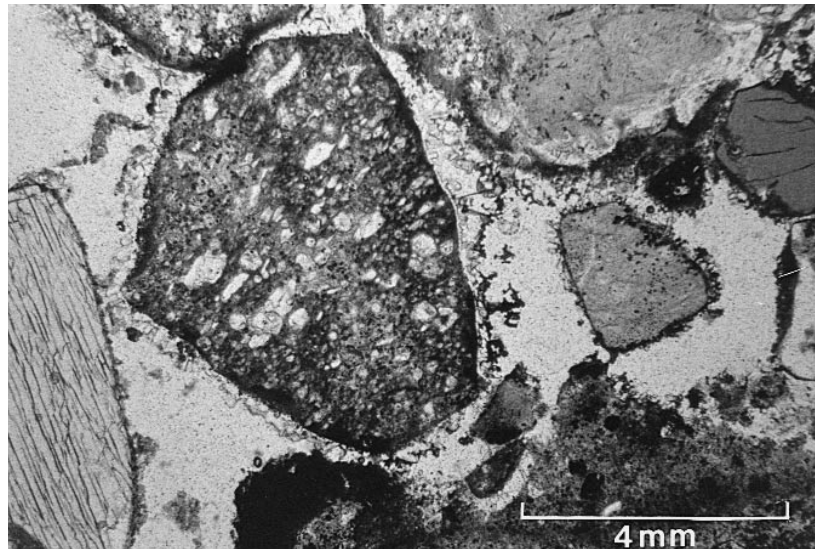


*Fig. 9. Sphinx, Vulci. Villa Giulia Museum Rome. After Hus 1977, XIII.c*

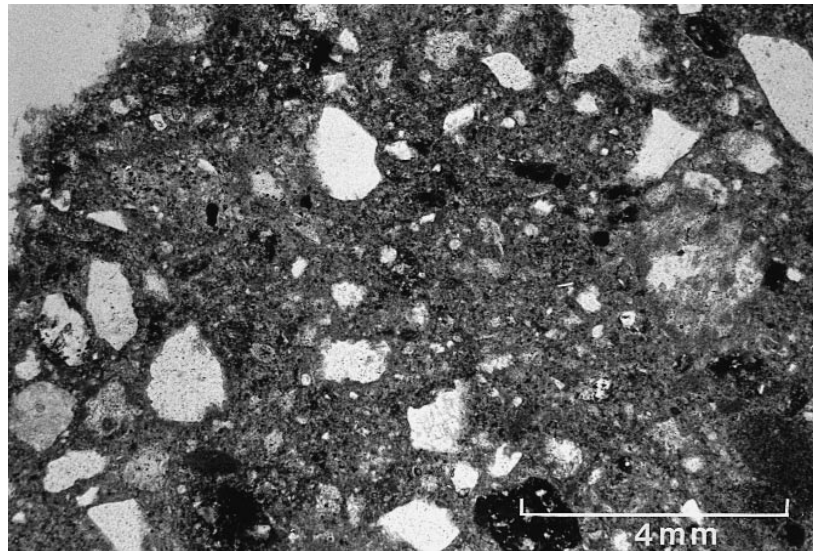


*Fig. 10. Head of sphinx, Veii. Villa Giulia Museum Rome. After Hus 1961, XXXIX.1*





*Fig. 11. Photomicrograph of thin section no. 1254, representing the rock of group 1*



*Fig. 12. Photomicrograph of thin section no. 1252, representing the rock of group 2*

plagioclase grains, a very few small grains of augite, and an accessory grain of quartz (*Fig. 11*). Besides the mineral grains seen in this fabric, several rock fragments are present. These fragments are all of a sedimentary origin and comprise lithologies such as sandstone, siltstone, quartzite and fragments of microcrystalline quartz. The groundmass is transparent in plane-polarised light and relatively homogeneous in texture, having a very porous appearance. Between crossed polaris-

ers the groundmass has an microcrystalline appearance with locally more or less defined areas or domains of pumice.

The second group consists of the fragment of the rear part of the body and the fragment of the trunk (cf. *table 1*). The mineral fraction of this second fabric is composed of euhedral crystals and crystal-fragments of sanidine and of augite, and locally some plagioclase, besides the mineral leucite is present (*Fig. 12*). The rock fragments seen in both



Table 1. Numbers and main petrographical characteristics of the samples investigated.

Inv.no.	ROB no.*	Description of fragment	Minerals	Rock fragments	Texture
11.877	1250	head of sphinx	sanidine, plagioclase, <i>augite</i> **	sandstone, quartzite, chert	microcrystalline matrix with domains of pumice
B 13.243	1251	rear of body with part or hindlegs	augite, sanidine, plagioclase	basaltic composition (unsaturated)	cryptocrystalline to amorphous matrix with fragments of pumice
B 13.244	1252	feline trunk	augite, sanidine, leucite	basaltic composition	cryptocrystalline to amorphous matrix with fragments of pumice
B 13.245	1253	base with scar of two paws	sanidine, plagioclase, <i>augite</i>	sandstone, quartzite	microcrystalline matrix with domains of pumice
B 13.246	1254	base with one paw	sanidine, plagioclase, <i>augite</i> , <i>quartz</i>	siltstone, chert	microcrystalline matrix with domains of pumice
B 13.246	1255	as no. 1254	sanidine, plagioclase, <i>augite</i> , <i>quartz</i>	sandstone, quartzite chert	microcrystalline matrix with domains of pumice

\* ROB thin section reference number; \*\* The minor components are in italics.

thin sections are of volcanic origin and have an unsaturated basaltic composition. The groundmass is transparent to translucent in plane-polarised light and is inhomogeneous. The groundmass becomes dark between crossed polarisers, illustrating its amorphous character.

The difference between both fabrics are determined by differences in composition in the mineral fraction (augite nearly absent in fabric 1), in the assemblage of rock fragments (sedimentary lithologies in fabric 1 v. volcanic material in fabric 2); besides the texture of the groundmass between both groups is somewhat different (with a more cryptocrystalline and porous character in fabric 1); see also *table 1*.

It can be stated in conclusion that within the five sphinx fragments two petrographically significant different fabrics are represented, which provides us with the conclusive evidence that the five fragments must derive from at least two different sphinxes.

#### SOME REMARKS ON THE MATERIAL AND ITS PROVENANCE

Stone sculpture in Etruria was made of local rock. For instance, sandstone and limestone were used in North Etruria and the Apennines, whereas some varieties of volcanic tuff were used in Central and South Etruria and in the Faliscan area (*Fig. 13*)<sup>13</sup>. Cerveteri and Civit  Castellana, for instance, used a variety which in historical and older petrological literature is known as *peperino*, whereas at Vulci and Veii both *peperino* and a variety known as *nenfro* was used. Both types of these volcanoclastic

or pyroclastic rocks are exposed in the area around Veii and especially north of Veii. For producing sculpture, however, the *nenfro* rock was preferred since it is less porous<sup>14</sup>. Although not verified by petrological analysis it is assumed that the sculptures known to be from Veii were all carved from *nenfro*. *Peperino* contains many lapilli and pumice and actually is, considering the petrological nomenclature a so-called ignimbrite instead of a volcanic tuff<sup>15</sup>.

Comparing this with the above-described thin sections (*table 1*) we arrive at the conclusion that the thin sections made of the fragment of the head, the fragment of a base with one paw, and the fragment of a base with the scar of two paws are of the *peperino* rock, whereas the other two fragments of volcanic tuff can be synonymous to the *nenfro*. If this conclusion is valid, then it means that not all sculpture from Veii is of *nenfro*, as stated above. After this rather rough classifying of the rock types which was sufficient for the purpose of the present study, one becomes curious about a broader insight into the exploitation of raw material for the production of Etruscan sculpture. This also will lead to a much more detailed insight into the provenance of the rocks or even the location of the quarries in Etruscan times. In the case of Veii, this will require a study in the field with the sampling of old

<sup>13</sup> Hus 1961, 443-447.

<sup>14</sup> Hus 1961, 443-444.

<sup>15</sup> The importance of the widespread volcanism in Italy has led to numerous geological, petrographical and geochemical publications. A useful review of the volcanology and petrology, together with an excursion guide, is given by Pichler, 1970.

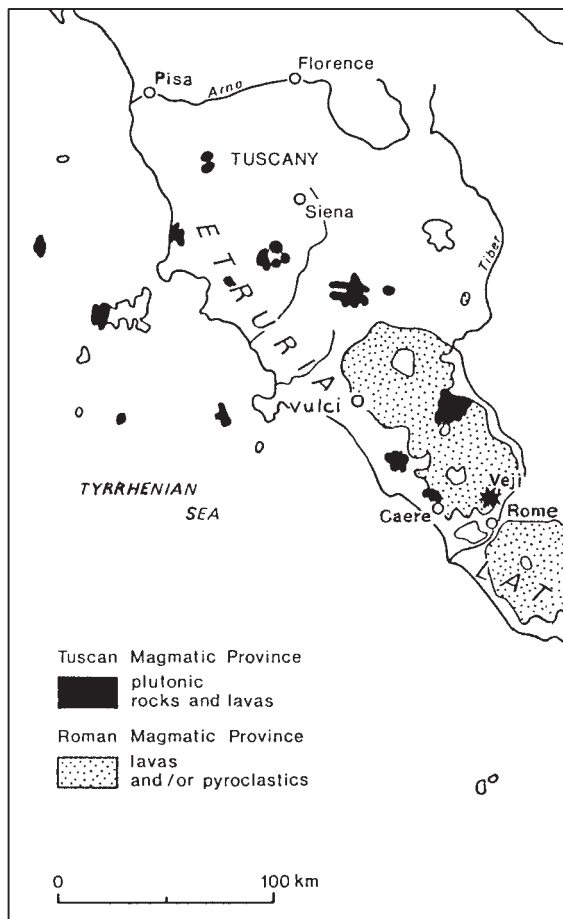


Fig. 13. Simplified geographical/geological map of central Italy

quarries and tuff strata in the volcanic region around and especially north of Veii. Such a study, however, is far beyond the scope of the study presented here.

#### RECONSTRUCTION AND NUMBER OF THE SPHINXES

It is fairly certain that the APM sphinxes were sitting or squatting. The fragments (B 13.245) and (B 13.246) reveal two paws which belong to forelegs. Hindlegs need more space: the toes of our paws are placed at the outer edge of the front of the base, neatly close to each other. This detail excludes the possibility that the animals were squatting or recumbent. Besides, fragment (B 13.244)

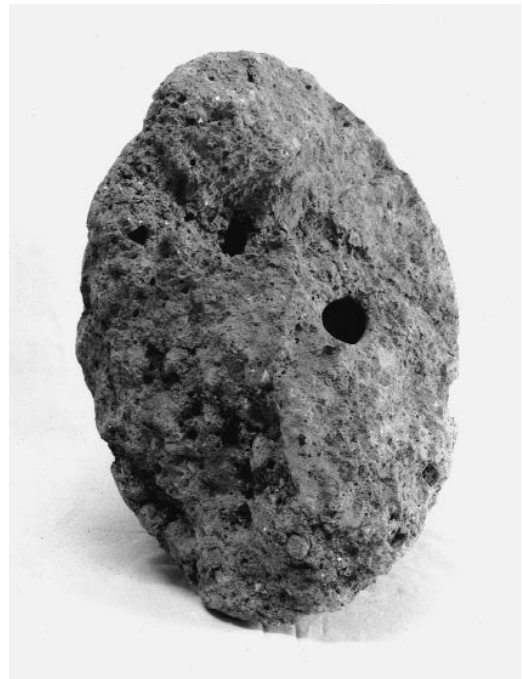


Fig. 14. APM 11.877, drill hole made for the preparation of thin sections

demonstrates that the trunk of the sphinx has not been lying on a basis, it is carved in the round and no scars of the basis remain at the lower side of the belly.

Of the 38 Archaic Etruscan stone sphinxes known to us, 23 were sitting with frontal heads, three with heads turned, eight reclining, and of four specimen, the position is unknown. Standing sphinxes are very rare. They are known from paintings and ceramics, and only one example is known in terracotta (Murlo)<sup>16</sup>. The weight of the material probably made it too difficult to carve a standing sphinx in stone. Since 1980 many more than the already known sphinxes have come to light. However, there is little chance that their number or type will change the situation sketched out by Hus and generally accepted since 1980<sup>17</sup>.

Thus, we may conclude that the largest number of sphinxes, known to be from Central and South Etruria, was sitting on the base, with a frontal head in one line with the body. The APM sphinxes are no exception. The tentative reconstruction in Fig. 15a gives us an idea of the position.

It is very likely the fragments once belonged to the same sculpture(s). Unfortunately, the fragments do not join. An indication for a secure attribution of two fragments to one sculpture is lacking. Usually, in reconstructing sculptures from fragments such as these, one tends to opt for a minimum of figures, since a maximum number of sculptures (in this case five) seems implausible. Tomb guardians usually go in pairs. Indeed, after a first investigation, there must have been at least two sphinxes, since the fragments (B 13.245) and (B 13.246) both reveal a right corner with a right paw. The fragments (B 13.243) and (B 13.244) cannot belong to the same sculpture as well, since the diameter of the break between hind and trunk of (B 13.243) is too large to join with (B 13.244). The head can belong to either one of the sphinxes. A reconstruction drawing can be made without much effort. However, there are some overlaps between the separate fragments (*Fig. 15a*). On this basis, we have deduced that the fragments belong to more than one sculpture.

The petrographical evidence has shown that the head (APM 11.877) and both fragments with the front paws and the bases (B 13.245) and (B 13.246) belong to one type of volcanic stone (peperino?), meaning that the sculptures to which these fragments belong, were carved from one block of stone. The same accounts for (B 13.243) and (B 13.244), both fragments of feline trunks, carved from one block of stone (nenfro?) and which cannot belong to one sculpture. Also these fragments belong to two separate sculptures which were carved from another block of stone. To confirm the possibility that the blocks of volcanic stone were taken from the same quarry, additional study of quarry samples is needed.

In short, the head (APM 11.877) and the fragments (B 13.245) and (B 13.246) belong to two sphinxes, while (B 13.243) and (B 13.244) belong to two pendant sphinxes. Thus, we must conclude that the head and the fragments of sphinxes in the Allard Pierson Museum belong to at least four separate animals; two pairs, carved from two blocks of volcanic stone. Although the number may seem unusual, four tomb guardians for one tomb is no exception.

As we have said before, tomb guardians usually go in pairs. This has been demonstrated by examples from Vulci and Chiusi<sup>18</sup>. From the Campana tomb at Veii, however, we have evidence that at least

four sphinxes were placed at the entrance of the tomb, two pairs at two different places in the *dro-mos*<sup>19</sup>. One pair at the entrance of the corridor and one pair at the entrance of the tomb itself. In this particular case we are fairly certain of the precise position of the sphinxes, since the bases remained *in situ*<sup>20</sup>. We have seen that our two pairs of sphinxes also came from Veii and, more precisely, were found in the entrance corridor of one tomb<sup>21</sup>. *Fig. 15b* gives an hypothetical impression of the position of the APM sphinxes at the entrance of the tomb.

Veii was not a very important centre for stone sculpture. Only five other fragments of sphinxes are known, three heads and two feline bodies. These probably belonged together<sup>22</sup>. We have seen that the heads are of a different artistic quality than the head belonging to one of the APM sphinxes (which is remarkably well executed). The Veii heads are somewhat clumsy and rude in execution and date from an earlier period (*Fig. 10*)<sup>23</sup>. A relationship between the sculptures from Veii and those from its more illustrious neighbour town Vulci has been already noted by Hus<sup>24</sup>. Our sphinxes seem to emphasize this relationship.

Our sphinxes, produced by probably one artist in the middle of the sixth century and definitely in Veii, show that the influence of Vulci as the artistic centre in stone sculpture reached Veii as well, as was already known for the early sculptures from the Campana tomb. The hitherto known sculptures from Veii are all from the first quarter of the sixth century. According to Hus, the Veientine production of sculpture ceased after 570-560 B.C. The APM sphinxes must have been carved in precisely the years around that date<sup>25</sup>.

<sup>16</sup> Hus 1961, Vulci 11, pl. XXIV; Murlo: I.E.M. Edlund-Berry, *The Seated and Standing Statue Akroteria from Poggio Civitate (Murlo)* 1992, ill. 5.

<sup>17</sup> Cf. note 2.

<sup>18</sup> Hus 1961, 406; Hus 1977, 31-47.

<sup>19</sup> Hus 1961, 398-407.

<sup>20</sup> Hus 1961, 398-424, especially 404-405 and figs. 4-5.

<sup>21</sup> Cf. note 11.

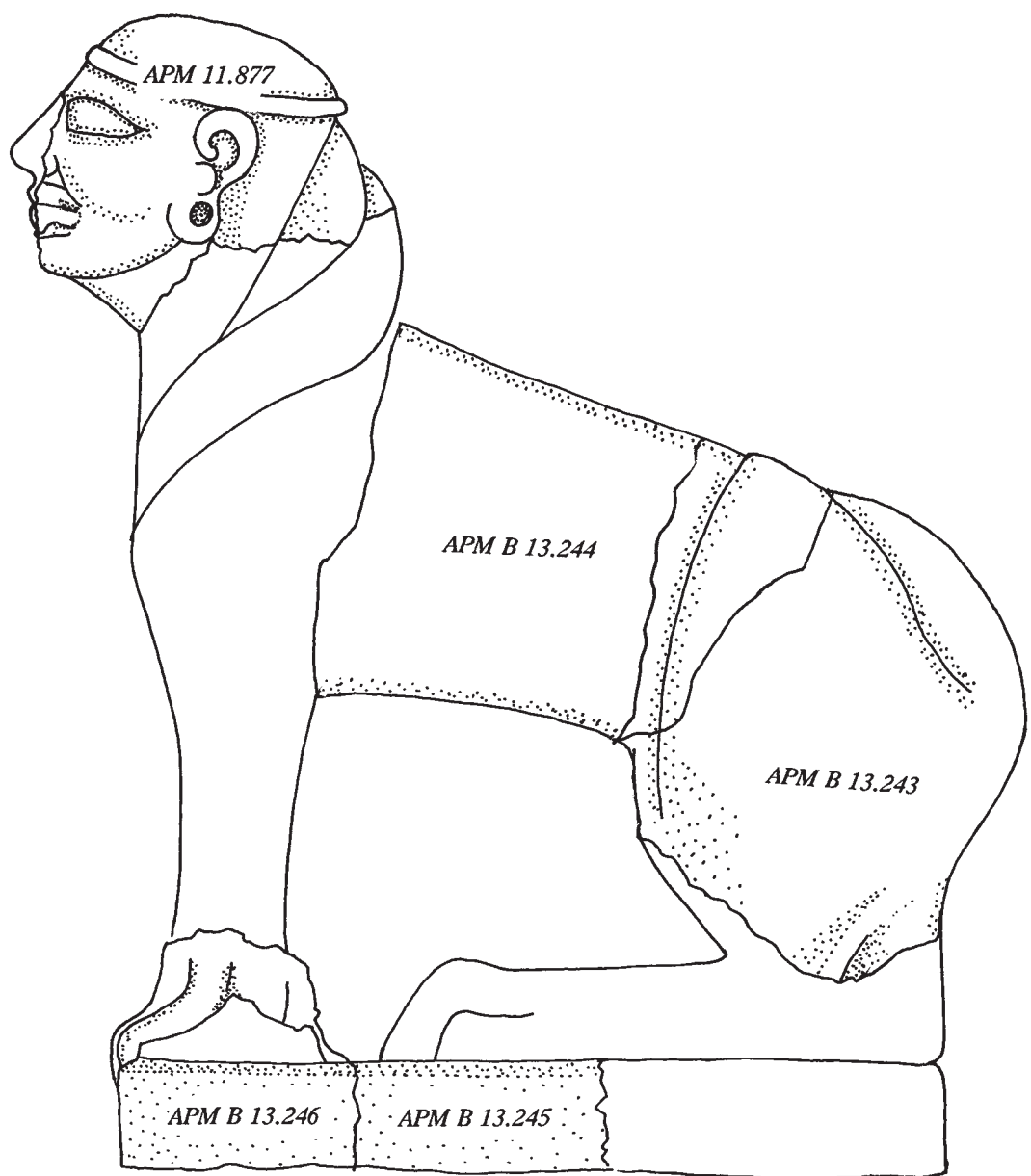
<sup>22</sup> Hus 1961, 308-310, pl. XXXIX.

<sup>23</sup> Photo Moscioni, *Etrusken* 1989, fig. 64; Hus 1961, pl. XXXIX, 1-2.

<sup>24</sup> Hus 1961, 312: it is highly improbable that sculptures of that size and weight, or even the material itself, were transported from one place to another.

<sup>25</sup> Hus 1961, 308-310.





*Fig. 15a. Reconstruction of APM sphinx(es), with integration of all fragments in one sculpture*

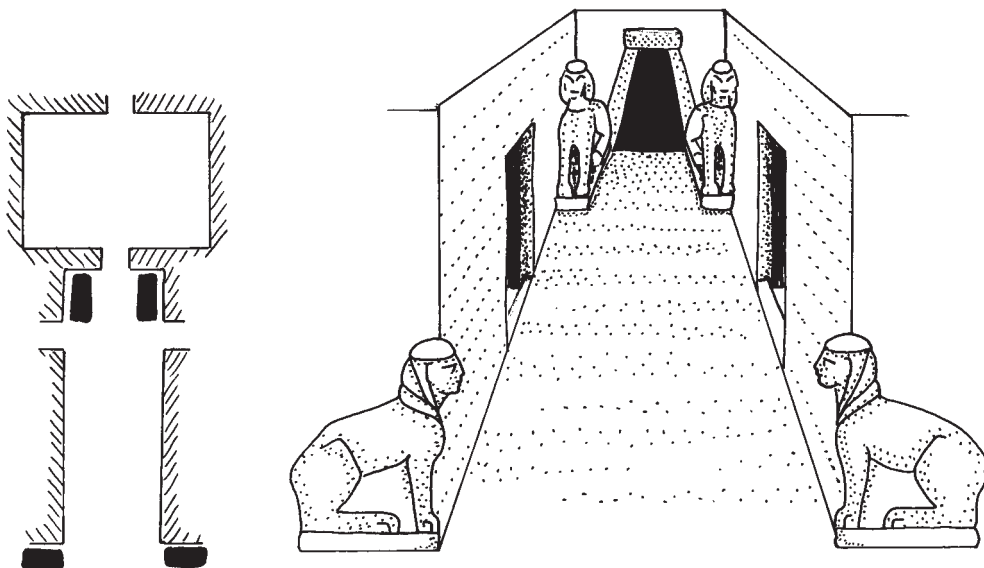


Fig. 15b. Reconstruction of dromos with tomb guardians

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# Between Babyka and Knakion

## Three Addenda<sup>1</sup>

Conrad M. Stibbe

### I. THE TOPOGRAPHY OF SPARTA

In the oldest constitutional document of ancient Greece, the so-called Great Rhetra, quoted by Plutarch in his *Life of Lycurgus*<sup>2</sup>, we find, among other things, a topographical indication of much interest. The Spartan assembly, so it says, should meet every month between Babyka and Knakion<sup>3</sup>. Commenting on this passage, no less an authority than Aristotle explained, again according to Plutarch, that Knakion was the name of a river and Babyka the name of a bridge<sup>4</sup>. In later times this topographical definition seems to have become so popular that it could be used as a substitute for the name of Sparta itself<sup>5</sup>.

From the very beginning of modern topographical studies of Sparta, specialists have sought to identify this river and bridge in the present-day situation of the town. As early as the start of the nineteenth century Leake made an obvious choice<sup>6</sup>, since there really seems to be only one candidate for the Knakion: this is the river, nowadays called the Magoula, which borders Sparta at its south-west side (*Fig. 1*)<sup>7</sup>. On the other hand the name of the main river, the Eurotas, which flows along the eastern side of the town, has never been in dispute<sup>8</sup>. Later topographers agreed with Leake on the identification of the Magoula with the ancient Knakion<sup>9</sup>.

If all this is correct, the bridge called Babyka should be sought at the opposite side, in the north-east, on the river Eurotas, because the Spartan assembly used to meet between the two extremes and within the boundaries of the city. There is only one ancient bridge of which we still have remains and whose location corresponds nicely to the place required (*Figs. 1-2*)<sup>10</sup>. The ending of a tantalising lacuna in Plutarch's text points in the same direction, where the river Oinous is mentioned<sup>11</sup> discharging into the Eurotas north of Sparta<sup>12</sup>.

There is, however, an alternative<sup>13</sup>. Plutarch says: "Babyka and Knakion are nowadays called ... Oinous." So this could mean that in the lacuna the more recent name of the bridge was followed by "and Oinous". This again would mean that the river Knakion is not to be identified with the modern Magoula to the south-west of Sparta but rather

with the modern Kelephina to the north-east, which has been convincingly identified with the ancient

I thank Martin Rush (Oxford) for improving my English. All photographs and drawings are by the author, unless otherwise stated. Addendum I: *Fig. 1* after Boblaye 1835, pl. 45. *Fig. 11* Photograph of Marco Overbeek. Addendum III: *Figs. 1-9* Photograph Klaus Sommer. *Fig. 10* Photograph Giraudon. *Fig. 11* Photograph courtesy of the Musée Archéologique, Nîmes. *Figs. 13-14* Photograph courtesy of the Art Museum, Princeton. *Fig. 15* Photography courtesy The Fogg Art Museum, Cambridge, Mass. *Fig. 16* Photograph courtesy of the Antikensammlung, Basel (Claire Niggli). *Fig. 17* after BSA 26 (1923-1924), pl. 21. *Fig. 18* Photograph courtesy of the Louvre, Paris. *Fig. 19* Photograph courtesy of the Musée Royal, Mariemont. *Fig. 22* Photograph courtesy of Mr. George Ortiz. *Fig. 23* Photograph courtesy of the Museum of Cycladic and Ancient Art, Athens.

<sup>1</sup> These Addenda add new material to three articles which were published in *BaBesch* 64 (1989) 61-99 (hereafter Stibbe 1989), *BaBesch* 66 (1991) 1-44 (hereafter Stibbe 1991) and *BaBesch* 67 (1992) 1-62 (hereafter Stibbe 1992).

<sup>2</sup> Plutarch, *Lycurgus* 6, 1. On the Great Rhetra there is a vast modern literature; for a useful summary see K. Bringmann, *Die Große Rhetra und die Entstehung des spartanischen Kosmos*, *Historia* 24 (1975) 513-538, reprinted in Karl Christ, *Sparta*, Darmstadt 1986, 351-386. For a bibliography see *ibid.* 494.

<sup>3</sup> The sentence reads: "When thou hast built a temple to Zeus Syllanios and Athena Syllania, divided the people into 'phylai' and into 'obai', and established a senate of thirty members, including the 'archagetai', then from time to time 'appellazein' between Babyka and Cnacion, and there introduce and rescind measures; but the people must have the deciding voice and the power." (translation Bernadotte Perrin).

<sup>4</sup> Plutarch, *Lycurgus* 6,2.

<sup>5</sup> See Plutarch, *Life of Pelopidas* 17,6. The dating of the Great Rhetra is not easy, but there are strong arguments for an early date (ninth century); see N.G.L. Hammond, *Studies in Greek History* (1973), 85-103.

<sup>6</sup> Leake 1846, 115; see also Leake 1835, map of Sparta "Topographical Sketch".

<sup>7</sup> At the time of Leake this river was called Tryptiôtiko. See also below note 16.

<sup>8</sup> From the middle-ages till the end of the nineteenth century the river was called Iris or Niris; cf. Stein 1980, 6 with n. 4.

<sup>9</sup> See e.g. Grote, *Griech. Gesch.* I, Plan of Sparta; Bursian 1868, 120; Kiepert, *Neuer Atlas von Hellas*, I, IV, VI; Von Prott 1904, 3-4.

<sup>10</sup> The remains of the ancient bridge at the north-eastern extremity of the modern town were identified as the Babyka bridge already by Stein 1890, 8, who, however, would locate the meeting place of the Spartan assembly in the fields to the north of the bridge on the west-bank, that is outside the town (see below).

<sup>11</sup> Plutarch, *Lycurgus* 6,2.

<sup>12</sup> Cf. Polybius II, 65, 9 and 66,7.

<sup>13</sup> I am grateful to professor Thuri Lorenz for calling my attention to the phenomenon, that the assemblies of early Greek societies in general would meet outside the towns. Cf. Th. Lorenz, *Agora*, in *Perspective der Philosophie*, *Neues Jahrbuch* 13 (1987) 383-407.



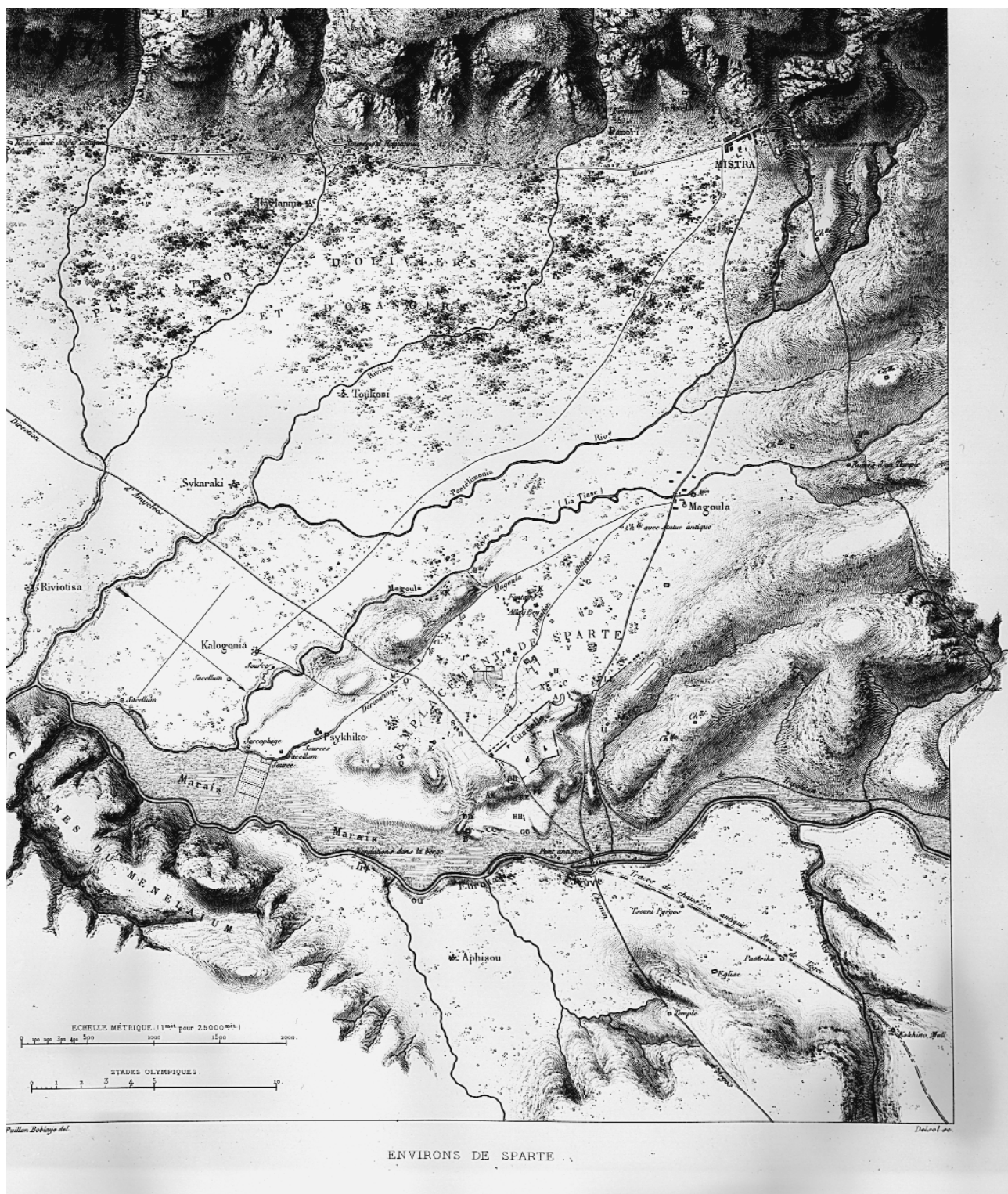


Fig. 1. Sparta and its surroundings in 1830.





Fig. 2. Two piers of the ancient bridge over the Eurotas, in 1993. On the background: work in progress.

Oinous<sup>14</sup>. If this were the case, the meeting place of the Spartan assembly would lie outside the town in the open lowland between the mouth of the Oinous and the ancient bridge near the north-eastern edge of the modern town, on the right bank of the Eurotas. This solution was proposed by Stein back in 1890, 7. Stein, however, believes that the name Oinous was also used to indicate the whole of the lowland ("Feldmark") to the north of Sparta, as far as the river of the same name<sup>15</sup>.

Whichever solution one prefers (Leake's or Stein's), the bridge is the same: it is the ancient one, whose remains are still visible (Fig. 2).

The fact that even Aristotle had to explain the names Babyka and Knakion to his readers suggests that these names were as old as the Great Rhetra itself and were changed at the latest in the fourth century B.C.<sup>16</sup>

The story of Babyka and Knakion obviously forms part of the literary evidence for the bridges in ancient Laconia. Despite this it is neither discussed nor mentioned in a recent extensive treatment of that subject by three English authors<sup>17</sup>. Their study is based mainly on an analysis of the routes and

bridges linking Sparta and the outside world. Other important sources of information, such as the road network inside the city, are virtually ignored. However, since their conclusions bear heavily on the topography of the city of Sparta, which I dealt with in *BABesch* 64 (1989), 61-99, some remarks on the subject are not out of place here.

Three roads, connected to three bridges, radiating from the city of Sparta to the north, east and south respectively, present us with three problems, and are of the greatest importance for our understanding

<sup>14</sup> Cf. ACS 293-294.

<sup>15</sup> Cf. note 10. Stein did not notice the lacuna and therefore thought Oinous to be the name of the territory between the river and the bridge. Oinous as a site, however, is attested in a Argive proxy inscription of the 5th century. Cf. G. Shipley, in: *Philolakon* 217, n. 41.

<sup>16</sup> It is not impossible that the name Knakion was changed into Tiasa, as Boblaye 1835 and Stein 1890, 6-7 have it. But see Von Prott 1904, 3-4.

<sup>17</sup> ACS 1992. In Stibbe 1989, 97-98 I briefly discussed the problem of the bridge(s) over the Eurotas, not mentioning the tradition of Babyka and Knakion, because it would have been out of place there. On Babyka and Knakion see also Bölte 1929, 3172.

of the topography of ancient Sparta<sup>18</sup>. After the construction of a continuous circuit defence wall by the tyrant Nabis in about 200 B.C., these bridges and roads would require three city gates. Hence the gates form an integral part of the three phenomena. To simplify the discussion I shall label these bridges nos. 1, 2 and 3. These correspond to the English team's bridges C, G and D<sup>19</sup>.

### Bridge 1<sup>20</sup>

When topographers deal with the roads, gates and bridges of ancient Sparta, the remains of an old bridge over the Eurotas to the north-east of the modern town are considered of primary importance<sup>21</sup>. These remains would constitute the proof for the fact that from ancient times till the present day (the modern bridge is constructed alongside the remains and follows more or less the same orientation) the main road from and towards the north (Tegea etc.) passes into the city of Sparta at that point. Within the city the road would have formed the main axis around which the different quarters could develop as they did, since towards and from the south (Gythion etc.) the same road would continue without a break.

This most simple and fundamental consideration would imply that, to whatever period the actual remains of the old bridge are to be attributed, they would at any rate indicate the spot where not only successors but also predecessors are and were located. The vital importance of the bridge at that point connecting the rather steep borders of the main river of the province would explain the fact that it acquired a special name, Babyka, as early as the Great Rhetra, right at the very beginning of the history of the Spartan state<sup>22</sup>.

Now, looking into the text of ACS, one is surprised to find the spot empty during the whole of antiquity. The present remains are dated to the Byzantine period<sup>23</sup>. In antiquity, according to these authors, traffic would have passed along the left bank of the Eurotas to a bridge much further south, here no. 2<sup>24</sup>. Another surprise is that ACS, although they were members of the "Laconian Survey" team<sup>25</sup>, do not seem to know the remains of bridge 1 by autopsy. Their arguments for dating are taken exclusively from observations by A.J.B.Wace at the beginning of this century<sup>26</sup>. If they had looked at the remains themselves they would have seen that the cores of the foundations of the piers are good Roman mortar work<sup>27</sup>. These foundations are now exposed even more clearly as a result of damage caused by bulldozers in 1992 (Figs. 2-5). Of course a bridge of this kind, which was used intensively down the ages, would have demanded constant care and repairs. Traces of such repairs

remain. Some of them may date to the Byzantine period (Fig. 5) as Wace observed<sup>28</sup>. It is very likely that the bridge mentioned in a inscription found by Fourmont at Mistra should be identified with bridge no. 1<sup>29</sup>. The inscription states that the bridge was repaired by Julius Paulinus, who probably lived in the third century A.D.<sup>30</sup> The first building date for the Paulinus bridge, however, as is now generally accepted, would be in the time of Augustus<sup>31</sup>.

There are some more arguments in favour of a Roman date of construction for bridge 1 and for the existence of Greek predecessors, probably built of

<sup>18</sup> To the west the Magoula-river would offer the possibility of another ancient bridge, but its existence is even more obscure than those in the other directions. Cf. ACS 305, bridge E.

<sup>19</sup> ACS 304ff. (C = Nikodemos' bridge, G = Xenophons' bridge and D = Leake's bridge).

<sup>20</sup> Some of the problems connected with this bridge in comparison with a hypothetical bridge more to the south (near no. 2) were already discussed by me in Stibbe 1989, 97-98.

<sup>21</sup> See e.g. Leake 1830, 151. Ibid. 1846, 116-117, where he states about bridge 1: "...the whole work has greatly the appearance of having been a work of the Roman empire..." Boblaye 1835, plan 45. Beadeker, *Griechenland* 263 (Lolling). Stein 1890, 8.

<sup>22</sup> The name Babyka is explained by Stein 1880, 8 as connected with "heulen, die Trompete...und bezieht sich auf das heulende Gebrause des Flusses an der Brücke." Cf. also Bölte 1929, 3172.

<sup>23</sup> ACS 298-300 and 304-305.

<sup>24</sup> ACS 301 call it "a small extra journey".

<sup>25</sup> ACS 294.

<sup>26</sup> ACS 304. Wace, *BSA* 13 (1906/7) 5-12.

<sup>27</sup> The mortar has the light-grey colour which is typical for Roman constructions of the kind in contrast to the dark-grey to reddish colour of Byzantine mortar. The mortar is reinforced with small unworked stones (no tile-fragments). It is faced by large blocks of worked stone (Fig. 4). Only one of the two remaining piers is easily accessible now. Its measurements are 3.0 m on the west and east sides, 6.0 m on the north and south sides. The north and south sides are reinforced by triangular structures. The whole pier inclines now to the east. Mrs. Tzeni Bougia, member of the American School in Athens and specialist in the field, was kind enough to confirm, after inspection of the piers, their Roman origin. Mrs. E. Kourinou, former epimeletria at Sparta, who prepares an extensive study on the topography of Sparta, is of the same opinion. I thank both of them for the information.

<sup>28</sup> After the destruction of 1991 (on which see below), a block of shapeless concrete from the upper part of the bridge finished nearby in the field (Fig. 5). In contrast to the foundations of the piers it is reinforced with tile-fragments and unworked small stones.

<sup>29</sup> For the inscription itself see *IG* V.I. 538; A. Wilhelm, *Inschrift zu Ehren des Paulinus aus Sparta, SB der deutschen Akademie der Wissenschaften*, 1913, 858-863; A.J.S. Spawforth, *BSA* 79 (1984) 263-288; ACS 307; since they deny a Roman date for no. 1, they think the inscription should be linked with a bridge to the north of Sparta which they label A or with no. 3.

<sup>30</sup> Cf. Spawforth o.c. (previous note).

<sup>31</sup> Bölte 1929, 1358; Stibbe 1989, 98; Cartledge and Spawforth 1989, 131.





Fig. 3. Concrete in pier of ancient bridge over the Eurotas.

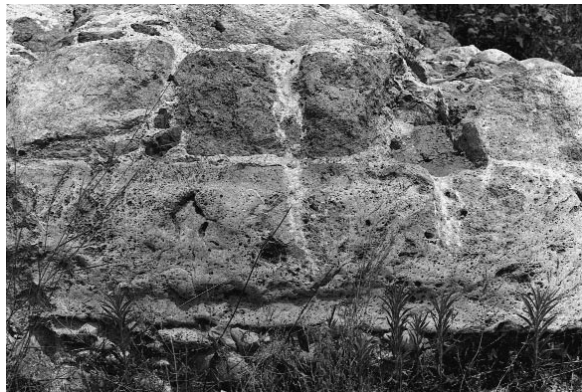


Fig. 4. Facing with squared blocks at the south-western end of the same pier.



Fig. 5. A mass of tiles bounded with concrete fallen immediately east of the same pier.

wood<sup>32</sup>. Parts of a road leading to bridge 1 on the left bank of the Eurotas, which appear on the French expedition map (*Fig. 1*) and were later lost, were subsequently rediscovered by G. Steinhauer while he was ephoros at Sparta. In addition he found, next to the road, a Roman milestone dating from the time of the emperor Diocletian<sup>33</sup>. Furthermore, on the right bank of the Eurotas, next to the modern and ancient bridges, Mr. Steinhauer uncovered part of an early Hellenistic street (some 4 m broad, bounded on either side by rows of stones). He commented that this street is probably the same as that seen by Dickins in 1905<sup>34</sup>. Dickins again noted that the traces of the road he saw, in trial pits, were “approaching the bridge-head”<sup>35</sup>. So, as a conclusion, we may safely state that the bridge on the Eurotas, whose remains are preserved to the present day, are of pre-Byzantine date and represent only one, but the most enduring, member of a series, of which Byzantine repairs on the one hand and literary sources for the earlier periods on the other, still give us an idea. This idea would be that bridge no. 1, from the very beginning of the life of the Spartan city-state in the ninth or eighth century B.C. right up to the present day, was constructed at the most logical and suitable place to serve north-south traffic in Laconia, where it enters the town.

<sup>32</sup> My own observation (Stibbe 1989, 98) that the orientation of no. 1 to the NW and not straight to the city-wall, implies that its predecessors predate that wall, has been dismissed by ACS 306 n. 53. Their opinion, however, that “A Byzantine date...circumvents this argument: the bridge will postdate the walls”, cannot be maintained, as we have seen.

Another argument in favour of a Roman date for no. 1 can be gathered from a comparison of the construction of no. 1 as it is shown in the drawing by Boblaye 1835 (reproduced in Stibbe 1989, 98, Fig. 32) with, for instance, the well-preserved Roman bridge near Xerokambi in southern Laconia (*Fig. 6*). The right side of the Xerokambi-bridge resembles the right pier on the Boblaye-drawing. It seems, that they were constructed in about the same period, that is in the first century B.C. or A.D. For the bridge near Xerokambi see H.-J. Höper, *Boreas* 4 (1981) 97-105 and ACS 297 and 305.

<sup>33</sup> As Mr. Steinhauer kindly informed me, the milestone was brought to the Sparta-Museum and shall be published, with the other evidence, in due course. To ACS 305 “...it is improbable that the French road was ancient.”

<sup>34</sup> Steinhauer 1972, 244 with no. 12.

<sup>35</sup> G. Dickins, *BSA* 12 (1905/6) 437. In the same volume of *BSA*, p. 9, A.J.B. Wace produced another idea about this bridge, in clear contrast to his fellow-excavator. See below, bridge 2. ACS who follow Wace, try to refute this argument by

### Bridge 2

This bridge, whose possible existence is based exclusively on an hypothesis formulated in 1906 by A.J.B. Wace, is called “Xenophon’s bridge” by ACS<sup>36</sup>. Since I have shown earlier that Wace’s arguments, although accepted by Bölte 1929, do not withstand a closer scrutiny, however tempting they seem at first sight, I shall not repeat my objections here<sup>37</sup>. Wace’s basic idea, that there must have been a short route to Therapne for the purposes of the annual festival of Helen (excluding a detour to a more northerly bridge) seems plausible enough, but it is not sustained by any trace of evidence *in loco*, for example an orientation of the city wall in the direction of such a bridge. Moreover, the nature of the terrain makes the construction of a bridge at that point extremely improbable: the river is too broad and the banks are too low (on the map of the French expedition, *Fig. 1*, the right bank is shown as a wide marshy area)<sup>38</sup>.

After all, for the occasion of a festival, which was probably held only once a year, it was perhaps not comfortable but by no means impossible for the participating maidens and their carts<sup>39</sup> to take the trouble to detour to the bridge which already existed about one kilometre further north. For the inhabitants of the northern quarters of the town (Pitane and Limnai) the use of the northern bridge would be no extra burden. For the daily intensive traffic from the north to the south, on the other hand, the need to take a roundabout route along the left bank of the Eurotas before entering the city would represent a real obstacle.

Our conclusion must be that the bridge 2 probably never existed.

### Bridge 3

We now turn from the eastern side of ancient Sparta to the south. As we have seen the city was flanked there by the Magoula river, perhaps in ancient times called the Knakion. Here the state of affairs is much the same as on the east. Again ACS do not seem to know the situation by autopsy. Their conclusions are based on a modern hypothesis, this time formulated by Bölte alone. Again there are remains of an ancient bridge preserved about one km away from the point where Bölte and ACS would like to localise one. These ancient remains are unknown to ACS, whereas Bölte (1929, 1355) at least quotes the local connoisseur K. Nestorides who, in 1890, noted the ancient foundations of a bridge which now serves the traffic to Ayos Ioannis and once, according to Bölte, gave access to the road to Sklavokhori (= ancient Amyclae)<sup>40</sup>.

Let us try to disentangle this rather complicated issue. Our main problem is that we do not know for certain the route of the ancient highway which connected Sparta with Amyclae and continued on from there to the harbour of Gythion. The most obvious solution would be that the route was a continuation of the highway which enters Sparta from the north (using bridge 1) and, crossing the saddle of the acropolis, becomes the main axis of the town, as we have already said. This main axis is called the Aphetais by Pausanias (III, 12, 1 – III, 13, 6)<sup>41</sup>. It would leave the town somewhere in the south, crossing the river Magoula by bridge, and then run straight to Amyclae, like the modern highway. Again the map of the French expedition gives us a clue (*Fig. 1*). Apparently the route never went out of use, not even during the middle ages and later, when Sparta did not exist anymore: it is indicated on the map as “Direction d’Amyclées”. At that time this was a guess, because nobody knew where ancient Amyclae really lay. The only certain point of reference was the hill of the Ayi Kyriaki, where the famous sanctuary of Apollo-Hyakinthos (the Amyklaion) was identified<sup>42</sup>. For this reason Bölte (followed by ACS) thought that the ancient highway to Amyclae would have taken a different route from the road to Amyclae indicated on the map of the French expedition, *i.e.* more to the east and closer to the river Eurotas, so as to offer the shortest route to the Amyklaion for the participants at the annual festival of the Karnea<sup>43</sup>.

maintaining that the roads of Steinhauer and Dickins run at right angles to each other, which remains to be proved (ACS 305, n. 42).

<sup>36</sup> ACS 306.

<sup>37</sup> Bölte 1929, 1370.

<sup>38</sup> Stibbe 1989, 97-98. ACS 306, while treating the arguments in favour of the existence of bridge 2, do not mention my arguments against Wace’s view, thus simplifying the discussion. I, in my turn, shall not go into details about their arguments taken from Livy and Polybius, because, as I have said earlier, they are not clear enough to be used in favour of the location of a bridge (and a gate) more to the south (no. 2) or more to the north. (no. 1).

<sup>39</sup> On the festival see S. Wide, *Lakonische Kulte* (1893), 344.

<sup>40</sup> These remains have not been treated by me in Stibbe 1989, because at the time I did not know about their existence. It was only during a recent visit that I discovered them, thanks to the low level of the Magoula-river and a closer scrutiny of the modern bridge.

Bölte 1929, 1355: “Die Magoula überschritt der Weg nach Sklavochóri auf der Brücke, die heute dem Verkehr nach Ayos Ioannis dient..”. This was also my opinion in Stibbe 1989, 69.

<sup>41</sup> On the Aphetais see Stibbe 1989, 66ff.

<sup>42</sup> This identification was already proposed by Leake 1830, 133-147 and confirmed by the discovery among other things, of stamped tiles in 1890 (*Praktika* 1890, 10; *AM* LII, 1927, Beilage X).

<sup>43</sup> In the same way Wace 1906, 6f. thought of the shortest route to Therapne for the participants at the festival of Helen, as we have seen above.

The starting point for this reasoning has been removed, however, by the discovery of the sanctuary-heroon of Alexandra and Agamemnon near the church of Ayi Paraskevi in the nineteen-fifties<sup>44</sup>. This sanctuary-heroon was situated, as we know from Pausanias (III, 19, 6), within the town of Amyclae. The church of Ayi Paraskevi in its turn is located in the southern part of the village of modern Amykles (former Sklavochori). Therefore we can no longer maintain that ancient Amyclae lay next to the sanctuary of Apollo-Hyakinthos, that is, in Bölte's view, on a road leading from Psychikó (a hamlet at the south-east corner of modern Sparta) to Riviótissa, Tsaúsi (the supposed location of Amyclae) and Vaphio<sup>45</sup>.

We now know that the sanctuary of Apollo-Hyakinthos was *extraurbanus*. The *hodos Hyakinthis*, probably a processional road, which is only once mentioned in ancient literature<sup>46</sup>, could have been either a *deverticulum* branching off the highway Sparta-Amyclae or the highway itself<sup>47</sup>. So, after all, a special road, leading direct from Sparta to the Amyklaion, an isolated sanctuary, seems to be as improbable as a special road leading direct from Sparta to the Menelaion, as we have seen before.

There are no traces of an ancient bridge near the hamlet of Psychikó, which might reinforce the hypothesis of Bölte and ACS<sup>48</sup>. Such traces are found, however, about one km to the west, at a point which seems to coincide nicely with the crossing of the Magoula on the highway to Amyclae on the French expedition map (*Fig. 1*). Bölte acknowledged the fact but did not draw any consequences from it, because he did not know, as we have said before, that the village of Sklavochori of his day would in fact be identified with ancient Amyclae. Unfortunately on the map of the French expedition there is no indication of the small church of Ayos Nikolaos nor of the road to Ayos Ioannis, which nowadays splits off to the right after crossing the bridge at that point. Nevertheless we may be sure of being at the right place (cf. Bölte 1929, 1355). Today the old chapel of Ayos Nikolaos has been replaced by a huge church of reinforced concrete (*Fig. 7*). The bridge next to it, built, like the church, after World War II, conceals under a broad road surface its much narrower predecessor (*Fig. 8*). The two arches of the older bridge are built with hewn stone blocks. Their foundations on both sides are still visible in the river-banks and may be dated to late Roman or early Byzantine times by the type of concrete reinforced with small stones and fragments of tiles (*Fig. 9*)<sup>49</sup>. The reason for the construction of a bridge at this point may have been twofold: firstly the main street of Sparta, the Aphetais, would have finished here at a gate in the

nearby city wall<sup>50</sup>; and secondly the river banks, which upstream are low and distant, at this point become high and close, and so have facilitated the construction of a bridge<sup>51</sup>.

In conclusion we may safely state that the ancient highway from Sparta to Amyclae and the sea passed over the bridge at the church of Ayos Nikolaos. The present state of the bridge shows three phases: 1 the modern bridge, 2 the 19th century bridge, and 3 the remains of a late Roman or early Byzantine bridge. Of course, with the intensive traffic, which is shown by this succession, there may have been predecessors of the earliest phase of which no traces are left.

So far so good. But things are ultimately complicated by a bridge of Roman times of which no traces other than literary ones are known. This bridge was seen by Leake at the beginning of the nineteenth century. At first sight his description seems to be accurate enough: "In the modern road from Magúla and Psykhikó towards Sklavokhóri, there is an ancient bridge over the Tryptiótiko, which is still in use. Its arch has a rise of about one-third of the span, and is constructed of large single blocks of stone, reaching from side to side: a part of the ancient causeway remains at either end of the bridge, of the same solid construction. A quarter of a mile beyond the bridge to the south-west, is the little village of Kalogoniá"<sup>52</sup>.

<sup>44</sup> BCH 81 (1957) 550; 85 (1961) 687; 86 (1962) 723f. Complete references in C.M. Stibbe, *Laconian Mixing Bowls* (1989), 134 n. 29.

<sup>45</sup> Bölte 1929, 1342, who contradicts Leake's view, that *his bridge* would serve the road to Sklavochóri. ACS 305 on the other hand, who follow Leake, contradict Bölte. The road leading from Psychiko, crossing Leake's bridge, to Sklavochóri, however, is even more hypothetical than Bölte's view.

<sup>46</sup> Demetrius of Skepsis, quoted by Athenaeus IV, 173f. Cf. P.G. Calligas, in: *Philolakon* 46-47.

<sup>47</sup> The possibility should not be ruled out, that there was once a bronze age road along the Eurotas, connecting the Amyklaion and Vaphio (possibly ancient Pharis), but after the founding of iron age Sparta the direct connection between Sparta, Amyclae and Gythion (avoiding the detour to the Amyklaion) would have been of much more importance.

<sup>48</sup> On the problem of "Leake's bridge", which is one of the main arguments for Bölte and ACS, see below.

<sup>49</sup> The structure of the middle-pier seems to be modern, that is contemporary with the bridge itself, not with the much older piers in the river-banks. The span of the first arch, coming from the town, measures 7.70 m, of the second, 6.85 m. Since the central pier has a width of 1.75 m., the whole span between the late Roman/Byzantine piers amounts to 16.30 m. To span such a distance with only one arch would cause no problem for a Roman architect (the bridges over the Eurotas and at Xerokambi have about the same measurements).

<sup>50</sup> Cf. Stibbe 1989, 68-69.

<sup>51</sup> Lower down the stream, especially at the height of the hamlet of Psychikó, this advantage disappears again.

<sup>52</sup> Leake 1830, 157.





Fig. 6. The Roman bridge near Xerokambi (Laconia).



Fig. 7. The church of Ayos Nikolaos and the bridge over the Magoula.



Fig. 8. The modern bridge over the Magoula next to the church of Ayos Nikolaos with the ancient bridge incorporated in it.



Fig. 9. Foundation of the ancient bridge next to the church of Ayos Nikolaos, between modern reinforced concrete below and the 19th-c. arch above.

Leake's statement that the bridge was "in the modern road from Magúla and Psykhikó towards Sklavokhóri" clearly refers to the road on the map of the French expedition (*Fig. 1*) between those two villages which leads to Sklavochori (= Amyclae). But later on he says that the little village of Kalogoniá is a quarter of a mile beyond the bridge, to the south-west. This addition causes a problem. On the map of the French expedition (*Fig. 1*) Kalogoniá lies to the *south-east* of the highway to Sklavochori. Was this a slip of Leake's pen, or are we entitled to suppose, as Bölte 1929, 1342, and after him ACS 305 have done, that Leake was referring to another road and, perforce, to another bridge? Bölte 1929, 1342 states, as if there is no problem at all, that "Die antike Straße überschritt

die Magula auf der ... Brücke zwischen Psychikó und Kalogoniá". This statement was most probably based on Leake's additional remark and on the (very unreliable) "topographical sketch", published by Leake in his first report (Leake 1830, pl. 2)<sup>53</sup>. On this sketch there is indeed an "ancient bridge" on the Magoula, with the village of Kalogoniá to the south-west of it.

The existence of this bridge, however, is made suspect by the fact that it was ignored by the French

<sup>53</sup> The sketch is full of errors, not only in interpretation, which is only understandable at that time, but also in the actual layout of the hills and the roads, the "marshy grounds" etc. The maps of the French expedition represent, in comparison, a real progress.

expedition, who surely would not have overlooked any ancient remains. Leake himself, in a later comment (Leake 1846, 115-116) was astonished and felt uneasy about this omission ("The ancient bridge at Sparta over the Tryptiōtiko ... has not been noticed by the French Commission"). He seeks to explain the fact by the following hypothesis: "Possibly it no longer exists, having been destroyed perhaps for the sake of its materials, together with the remains of an ancient causeway which I observed at either end of it ...". We may wonder why a bridge which, according to Leake himself, was still in use in his day, would have been destroyed without replacement, simply for the sake of its materials<sup>54</sup>.

It seems even more enigmatic that Leake in turn did not see the ancient remains of the bridge at the church of Ayos Nikolaos. According to Nestorides 1892, 39, 1, these were as visible at the end of the last century as they are today (Fig. 9).

Now, how can we resolve this "Comedy of errors"? One solution might be that Leake, who published his report twenty-five years after his visit to the place, confused the contents of his own notebooks<sup>55</sup>, and that in fact his bridge is the same as the one at the church of Ayos Nikolaos<sup>56</sup>. Another solution, equally possible, would be that there was indeed a Roman bridge at the point indicated by Leake, near Psychikó, but that it was a small one of little importance<sup>57</sup> which could easily have escaped the attention of the French expedition and of other topographers, until it was destroyed at an unknown date without leaving any trace. Perhaps this bridge was constructed to serve the private estate of one of the *nouveaux riches* of Roman imperial times.

In 1991 a new edition of Pausanias' third book, on Laconia, was published, with a historical and archaeological commentary by Domenico Musti and Mario Torelli<sup>58</sup>. Torelli, responsible for the archaeological section but interested, above all, in the religious aspects of the monuments, has given us a useful, up-to-date instrument and a fresh approach. As far as the topography of Sparta is concerned, his comments — and how could it be otherwise — have suffered from the enormous lacunae left by modern archaeological research on the site. Since we have, even today, no incontrovertible fixed points on the map to locate the ancient *agora*, Torelli, like everyone else, could make his own choice about where to put it. He decided (p. 192) that it was located on the saddle (Palaiokastros) between two hills of which the western one, with the temple of Athena Chalkioikos, has been identified as the acropolis. No excavations on this most important and central saddle show that he is wrong. So he was free to construct an enormous platform, on which, in the frame of a "radicale riassetto romano", the temples of Caesar and Augustus,

mentioned by Pausanias, would have looked over the town in almost the same way as in Rome one side of the *forum romanum* was transformed to a "grandiose quinta propagandistica", including the temple of Caesar and the arch of Augustus (p. 194). The other monuments mentioned by Pausanias on the Spartan *agora* are systematically arranged around the square: the Persian stoa, in an updated form, would have flanked the north side, the archaic buildings the west side and the Roman "edifici politici" the east side<sup>59</sup>. *Conditio sine qua non* for this view is that the so-called Roman stoa, which, in a most prominent position, even today forms an east-west barrier at the entrance to Palaiokastros, is not a stoa at all but rather "per le sue caratteristiche architettoniche e tecniche" a substruction for the terrace behind it. Torelli could not know about the recent English excavations in his substruction. Only some preliminary reports were published, but the excavators continue to call the building a "stoa"<sup>60</sup>.

<sup>54</sup> Stones being in abundance at hand.

<sup>55</sup> Cf. J.M. Wagstaff, Colonel Leake in Laconia, in: *Philolakon*, 277-283.

<sup>56</sup> This was my opinion in Stibbe 1989, 68-69. ACS 305 n. 44 concluded, of course, that "Stibbe has mistaken his position..".

<sup>57</sup> That argues Leake's later description (Leake 1846, 115): "...consisting only of a few blocks of stone of the same length as the breadth of the bridge, and forming a Roman arch of small elevation...".

<sup>58</sup> Torelli 1991.

<sup>59</sup> This setting has all the disadvantages of a reconstruction on paper. It seems *e.g.* very improbable that the archaic buildings would have been arranged nicely on the west-side, so to say waiting for centuries to be incorporated in the Roman *agora*. For my own views on the location of the *agora*, see Stibbe 1989, 65-66. The main objection against a location of the *agora* on the low grounds in the centre of the ancient town, as I suggested, is that this part was full of Roman houses; in Roman times one would have avoided to construct houses on the ancient *agora* (Torelli 1991, 192; also Mr. Steinhauer, former Ephoros, is of this opinion, as he kindly informed me). But to the south of the acropolis a large square without any traces of ancient building activities can be recognized on the map of the French expedition, just opposite the hill on which remains of an ancient temple were preserved (cf. Stibbe 1989, Fig. 4 and 85 n. 101). I would suggest that this square corresponds to a similar space in the modern town flanked by the Odos Leonidou in the west, the Odos Dioskouron in the south, the Leoforos Konst. Paleologou in the east and the Odos Triakosion in the north (Fig. 10). Within these boundaries no Roman houses are excavated or attested, as far as I know. But even if there were, they should have been at the periphery, not in the centre of that square, within which I would locate the *agora*.

<sup>60</sup> See, at the latest, *Archaeology in Greece* 1991-1992, 19-21. For a monumental setting, as proposed by Torelli, one would expect a monumental entrance, which, however, has not been found. Instead the "stoa" extends to the west as far as the "round building", which is included in its planning. On a lower level, near the "round building", are the walls of earlier Roman structures, probably houses. So the "stoa" should be of a later date (Hadrianic?) and could not have served as a kind of terrace-wall for the *agora* behind it. Compare also the German "Nachuntersuchungen" by P. Knoblauch in 1941 (AA 57, 1942, 156-157): they recognized even a first floor on the building.







Fig. 11. Ancient well near the church of Ayos Panteleimon in modern Sparta.

identification be confirmed, not in the last place by the possible discovery of the important monuments which Pausanias mentions in its direct neighbourhood.

Finally I should like to add some information about the most recent destruction of ancient monuments within the town of Sparta. This damage has been caused by negligence and indifference. In 1991, as part of a plan to straighten the banks of the Eurotas, bulldozers once again demonstrated their devastating power. In earlier years river embankments had been built up by dumping rubble from the houses of Sparta when these were replaced by modern concrete buildings. During this process incalculable damage was done to the remains of the ancient

town underlying the houses. In 1991 the embankments along both sides of the Eurotas were streamlined and a new water channel was constructed on the right bank, next to the ancient and modern town. The main cock of the canal was placed precisely at the spot where in 1906 the so-called Heroon at the Eurotas was excavated<sup>66</sup>. The remains of the heroon, consisting of part of its encircling wall, which was still visible in 1989 (Fig. 12), with the city wall which was constructed parallel to it (Fig. 13) so as to constitute a narrow street, were completely destroyed. Part of the foundations of the city wall more to the north suffered the same fate (its huge worked blocks now lie scattered around). The destruction of the ruins of the ancient bridge over the Eurotas has already been mentioned above (no. 1). Until 1991 this bridge still stood to a considerable height (Fig. 14)<sup>67</sup>. Now little more than the foundations of two piers survives (Fig. 2).

The discovery of this destruction had such an impact on the author that, in the spring of 1992, he tried to set up an international committee for the rescue of the antiquities of Sparta<sup>68</sup>. Although many friends and colleagues, both in Greece and abroad, supported this plan, it turned out to be impossible to implement it. This was because the English archaeologists who are interested in Sparta, or even working there, opposed it. We still hope, however, that in the future it will be possible to resume, in the framework of international cooperation, the important work initiated by the British in the beginning of this century<sup>69</sup>.

<sup>66</sup> On the heroon, possibly of Astrabakos, mentioned by Herodotus (VI, 69, 3) and Pausanias (III, 16, 6) see *BSA* 12 (1905/6) 288-299 with Pl. VII, fig. 3-6.

<sup>67</sup> This photograph was taken by the author during a visit in the autumn of 1989 in the late afternoon. The facing of the wall, of which by now only the lower two rows are preserved, stands vertically, because the whole pier is toppled over towards the river, that is towards the east.

<sup>68</sup> Of course the authorities of the Greek archaeological service were informed by me immediately after the discovery in 1992. I was told that the destruction took place a half year before, that is in the autumn of 1991.

<sup>69</sup> It cannot be denied that there is, after a long break, some sort of revival of interest in Sparta and Laconia on the British side. This is shown by the excavations of H. Catling at the Menelaion site (since 1973), by the so-called Laconia Survey by W.G. Cavanagh and J.H. Crowel (since 1983), by the exploration of the Roman stoa in Sparta by G.B. Waywell and J.J. Wilkes (since 1990) and by some publications. Apart from the article by ACS there is now a *Festschrift* for H. Catling, *Philolakon*.



*Fig. 12. Part of the encircling wall of the Heroon at the Eurotas (1989), before its destruction in 1991.*



*Fig. 13. Part of the city-wall of ancient Sparta near the Heroon at the Eurotas (1989), before its destruction in 1991.*



*Fig. 14. South-western pier of the ancient bridge over the Eurotas, before its destruction in 1991.*



## II. DIONYSIAC SYMBOLS ON FIFTH-CENTURY LACONIAN VASES<sup>1</sup>

Laconian pottery of the fifth century B.C. and later has attracted little attention among archaeologists<sup>2</sup>. The reason for this may be that this pottery loses much of its own character and much of the originality which was its characteristic during the archaic period: shapes and decorations degenerate and often spinelessly follow the successful examples of the Athenian *Kerameikos*. The production is mainly destined for the local market<sup>3</sup>.

Under these circumstances it is understandable that themes of general Greek character, for example mythological scenes, seem to be less in favour and are soon totally forgotten, while subjects of local interest, such as those to do with hero-cults, prevail whenever a vase-painter tries to do something more than repeat boring secondary ornaments. This turns out to be important to us, because we can now look into aspects of local religious preferences which were suppressed by the higher 'international' standards of the painters of the sixth century B.C.

In my 1991-paper in this periodical I mentioned a few vases and fragments of vases which might be associated with the hero-cult in Laconia<sup>4</sup>. To make that collection more convincing I would like to add here a series of examples which cover at least the whole of the fifth century B.C. These examples represent however only a small selection from a bulky *corpus* found in the heroon of Agamemnon at Amyclae<sup>5</sup>. Vases of this kind (mostly cups) have also been found in other heroa, but in much smaller quantities. They are still unpublished<sup>6</sup>.

The fragments (none of the vases is intact) are arranged here in groups according to the subject of their decoration<sup>7</sup>. The first group (nos. 1-8) comprises the pieces with black-figure decoration. On nos. 1-3 scenes with underworld deities sitting on thrones are depicted in a manner strongly reminiscent of the hero-reliefs in stone and hero-plaques in terracotta<sup>8</sup>. Nos. 4 and 5 clearly show Dionysiac figures (komasts and a satyr?). The last three members of this group (nos. 6-8) are included because of their unusual figured decoration, which seems to offer more evidence for the philosophy of life and death to which they relate<sup>9</sup>.

The second group consists of nos. 9-14. Nos. 9-13, which are all fragments of cups, show in their handle-zones combinations of snakes, grapes, vine leaves or ivy leaves and one or more vases. There are kantharoi depicted on nos. 9, 11, 12 and 13, and a cup and a kalyx-krater on no. 10. No. 14 has a kantharos combined with pointed leaves.

The third group consists of nos. 15-21. Nos. 15-19 combine snakes and leaves. No. 15 has a pointed leaf

and an ivy leaf; no. 16 has dot rosettes which may be meant as ivy fruits (cf. no. 21). Pointed leaves may be interpreted as degenerated grapes, as is suggested by the decoration of no. 19. With no. 20 the snake and the vine branch seem to be fused, whereas with no. 21 only an ivy branch with fruits is left. To show how the foot of one of these cups might look I have added a sophisticated example to the Catalogue (no. 22).

If we take together the evidence of the decoration of the groups, which is representative for the whole *corpus*, one feature above all becomes clear: the symbols of the underworld (the snake) and of the wine-god Dionysos (grapes, ivy, kantharoi) are placed on the same line. They illustrate the fact that people, who wanted to worship the heros Agamemnon at Amyclae, believed that he lived on in the underworld which was governed by Dionysos and not by the older Hades, the Homeric governor of the dead. This conviction, which may derive from the influence of the Orphic movement in the second half of the sixth century and later<sup>10</sup>, is also expressed in the iconography of the first group (nos. 1-5). Here the symbols are not isolated, as is the case with the other groups, but are incorporated into the same scenes we know from the stone reliefs and the terracotta plaques. However, since these scenes have been much discussed and their interpretation as Dionysos (and Demeter) has not been generally accepted<sup>11</sup>, the new evidence of the fifth-century vases is presented here as a decisive argument, in the author's view, in favour of this interpretation.

<sup>1</sup> This is an addendum to my article "Dionysos in Sparta", *BABesch* 66 (1991) 1-44, hereafter designated Stibbe 1991. Once more I must thank Prof. Chr. Christou for permission to study and to publish a selection of material from his excavation of the bothros belonging to the heroön of Agamemnon at Amyclae.

<sup>2</sup> Cf. Ian McPhee, Laconian Red Figure from the British Excavations in Sparta, *BSA* 81 (1986) 153-165. The export was very limited. Fragments of blf. Laconian vases have been found in Cyrene: Schaus no. 185 (with a grape vine), nos. 224, 225 (with Dionysos or a banqueter?), 226 and 262. Blgl. Laconian vases of the fifth cent. B.C. are found, outside Laconia, mainly on Sicily: Stibbe *LBP* I, 58-59.

<sup>3</sup> Cf. e.g. *AO* figs. 77, 80, 81.

<sup>4</sup> Stibbe 1991, 39.

<sup>5</sup> For a bibliography on the excavation see Stibbe *LBP* I, 134 n. 29.

<sup>6</sup> E.g. in the so-called heroon at the Eurotas, within the town of Sparta; for this heroon see A.J.B. Wace, *BSA* 12 (1905/6) 288-294 and Stibbe 1989, 87-88. Also *supra*, Addendum I.

<sup>7</sup> For a chronological sequence many more examples, also from the black-glazed production, should be taken in consideration. This remains one of the many *desiderata* within the orbit of Laconian studies.

<sup>8</sup> For these see Stibbe 1991, *passim*.

<sup>9</sup> Most unusual are the dog (if it is a dog) on no. 6, and the caricature head on no. 7, as well as the extremely nice outline head on no. 8.

<sup>10</sup> Cf. Stibbe 1991, 32-33.

<sup>11</sup> For the various interpretations see Stibbe 1991, 12-20.



In my previous article on the subject (Stibbe 1991, 24) I suggested that the original idea expressed by the iconography of the hero-reliefs of the first generation was gradually lost, and about 500 B.C. it was replaced by the general Greek conception of the hero-cult. The often-recurring symbols of Dionysiac character found on the vases, however, seem to show that the more primitive or popular<sup>12</sup> religion, as opposed to the ruling aristocratic and homeric one, still survived in Sparta throughout the fifth century B.C.

## CATALOGUE

### Guide

The descriptions in the catalogue have been kept to a minimum. The following characteristics apply to all entries and are not repeated in the catalogue.

The glaze is dull black, unevenly applied. The clay is light brown with a tendency to orange or grey, and shows few or no inclusions. The decoration on the inside is black, on the inside of cups mostly with a reserved empty medallion in the centre of the floor, sometimes also with a reserved band on the rim at the junction with the wall. The type of the cups is always a derivative of the archaic Laconian 'Droop-cup', which I have labelled a 'Dorian cup' (cf. Stibbe, LV 142-145 and LBP II, *passim*). Sometimes fifth-century Laconian cups of the Dorian type reach a high level of refinement in shape and decoration, as demonstrated by no. 2.

The catalogue includes only one kantharos (no. 1), though quite a number are depicted on the walls of cups: on nos. 2, 9, 11, 12, 13 and 14. It is interesting to note that all these kantharoi painted on cups are of one and the same type. They have high handles, a flaring high wall, a low round bowl and a high foot (in two cases, nos. 9 and 12, reinforced with a plastic fillet at the join with the body). No. 1, in contrast, has a bowl which is angular rather than rounded. These two types of kantharoi have been studied by me earlier (Stibbe 1978, 26-32, type III and type IV respectively).

The following abbreviations are used in the Catalogue: H. = Height, W. = Width, Dm. = Diameter, Th. = Thickness, inv. no. = inventory number

### Group I

#### 1.

Fragment of the bowl and the wall of a large kantharos. H. preserved 9.0, total height estimated 30.0, dm. of lip estimated 40.0. On wall: Part of deity or hero sitting on throne with lion and equine legs. Before him two women (white legs!) in long robes walking towards him. Behind him one standing woman in a long robe.

First published in C.M. Stibbe, *Lakonische Kantharoi*, *MNIR* XL, N.S. 5 (1978), 40 note 31 with p. 31-32 no. 23, Pl. 18, 2; 19, 1; Fig. 12.

#### 2.

Three fragments of the wall of a cup, non-joining. Inv. no. 6116. H. preserved 10.2, dm. estimated 21.0. *Figs. 1-2.*

*a* H. 10.0, W. 12.0, Th. 0.6. Black rim. In handle-zone god or hero sitting on throne, holding large kantharos in his right hand, a wreath in his left. Before him upcurling snake and large handle-palmette.

*b* Inv. no. 6114. H. 9.0, W. 10.2, Th. 0.6-0.7. Black rim. In handle-zone two standing figures facing each other, in long cloaks, one holding a wreath in his left hand, a branch with leaves in his right. Behind him a upcurling snake, a tree and part of an handle-palmette. Also behind the other figure is a part of a handle-palmette.

*c* H. 7.0, W. 6.7. Black rim with part of handle-zone decorated with branch and small part of a handle-palmette springing from the edge of a handle-attachment.

Fragment *a* was published in *MNIR* XXXVIII, N.S. 3 (1976) 13, Pl. 5, 1.

#### 3.

Fragment of a large cup. Inv. no. 6106. Dm. estimated 32.0. Preserved 22.5 x 12.2, Th. 0.6 – 1.1. Deity or hero, probably sitting on a throne. Before him warrior with helmet and lance.

C.M. Stibbe, LV 43 with no. 6, 290, Pl. 132, 7; *MNIR* XXXVIII, N.S. 3 (1976) 13, Pl. 4, 3.

#### 4.

Fragment of the rim and the body of a cup. *Fig. 3.* H. 7.2, W. 7.2, Th. 0.4. Black rim. In handle-zone two naked dancing komasts and part of the head of a third. To the right an unclear figure (standing man in a long cloak?).

#### 5.

Fragment of the wall of a cup. *Fig. 4.* 4.2 x 5.5, Th. 0.5-0.3. Two black bands around foot-attachment. On upper band lower half of the body of a satyr: legs and tail of a horse, upper body and arms (outstretched) of a man. Before him part of an upcurling snake.

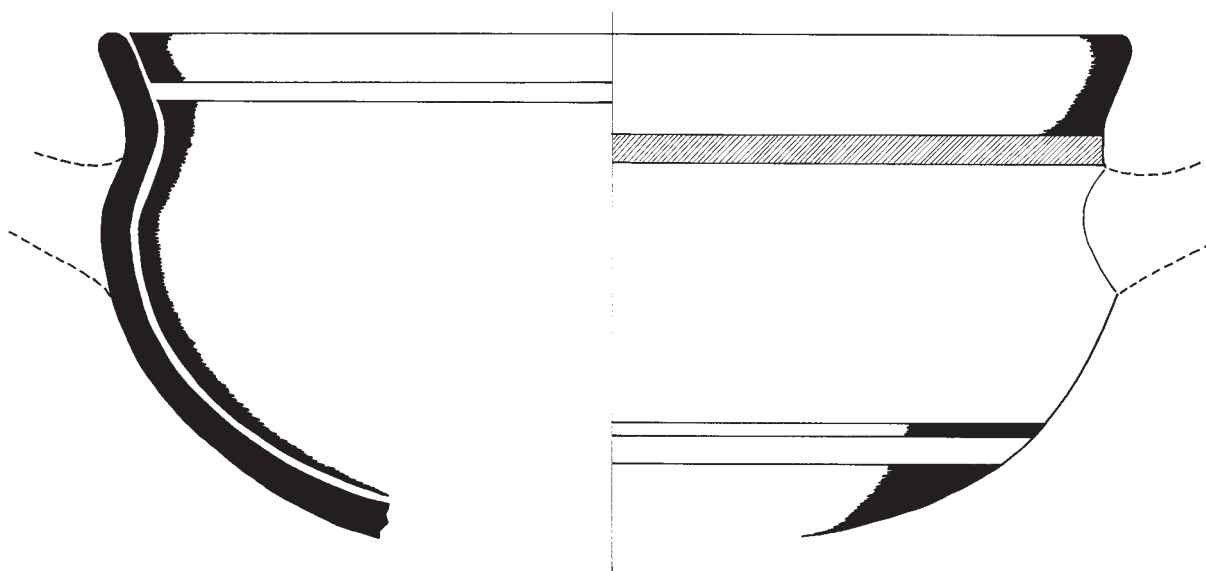
#### 6.

Fragment of the rim and wall of a cup. *Fig. 5.* H. 5.1, W. 3.8, Th. 0.3. Black rim. In handle-zone part of the body of a dog (?) to r. Two purple dots on the head (the smaller one is the eye), a white collar with row of white dots, purple lines on the breast.

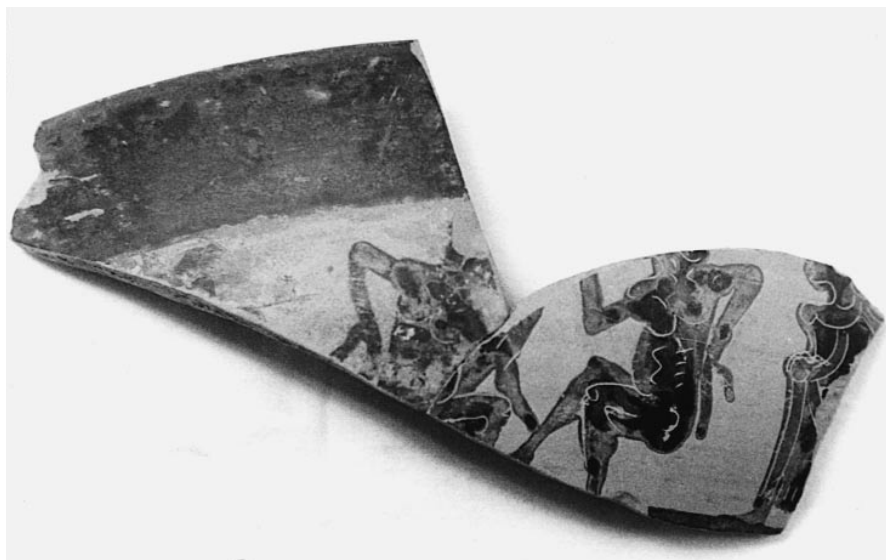
<sup>12</sup> On this subject see N. D. Papachatsis, *AE* 129 (1990) 1992, 1-81.



*Fig. 1. Sparta, Museum 6116, fragments of a cup, cat.no. 2.*



*Fig. 2. Sparta, Museum 6116, fragments of a cup, cat.no. 2, profile drawing.*



*Fig. 3. Sparta, Museum, fragment of a cup, cat.no. 4.*



*Fig. 4. Sparta, Museum, fragment of a cup, cat.no. 5.*



*Fig. 5. Sparta, Museum, fragment of a cup, cat.no. 6.*





Fig. 8. Sparta, Museum, fragment of a cup, cat.no. 8.

Fig. 6. Sparta, Museum, two fragments of a cup, cat.no. 7.

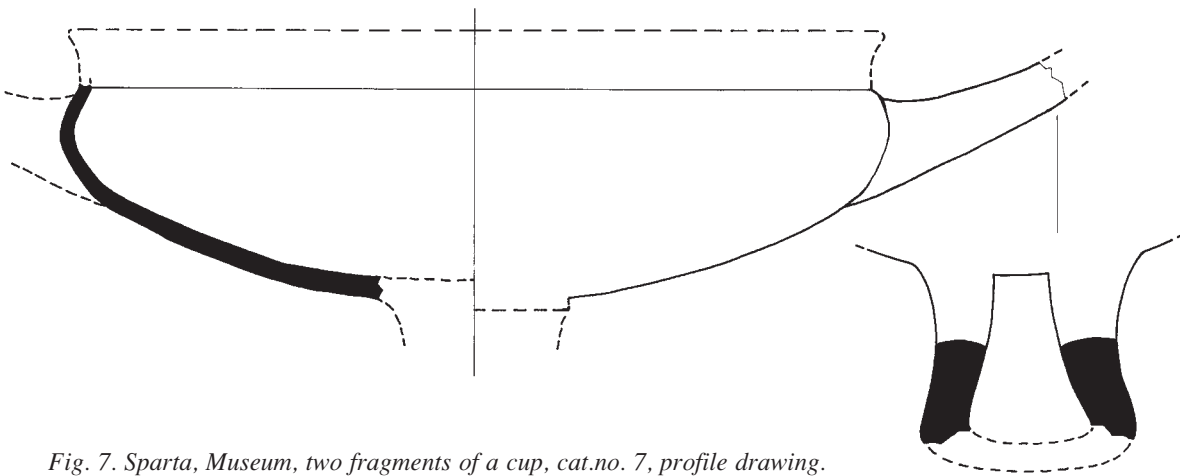


Fig. 7. Sparta, Museum, two fragments of a cup, cat.no. 7, profile drawing.

7.  
Two fragments of the wall of a cup, one with handle-  
stumps. *Figs. 6-7.*

*a* 7.0 x 10.0, Th. 0.4. Black bands and lines around  
foot-attachment. In handle-zone, below handle-  
attachments, a caricature head in outline; bulky nose  
and chin, crisp-haired; his fat neck is painted straight  
through the encircling bands of the underside of the  
cup. In rest of handle-zone ivy wreath (purple or  
white dots on the leaves).

*b* 11.6 x 4.0, Th. 0.3-0.5. Underside and handle-zone  
like *a* (white dots on ivy leaves well preserved).

8.  
Fragment of the wall of a cup. *Fig. 8.* 9.5 x 6.5. In the  
handle-zone part of the head, neck and shoulder of a  
young man or a woman in outline, looking to the left.  
Before the head rest of an unclear object, below two  
encircling lines of the decoration of the underside (prob-  
ably a black zone, as on no. 7.)

## Group II

**9.** Eight joining fragments of the rim, body and one handle of a large cup. *Figs. 9-10*. H. of body estimated 9.5, Dm. estimated 25.0, Th. 0.8-0.6. Black rim. In handle-zone on one side the coiling body of a big snake with purple and white dots on it. Bunches of grapes between the coils. The forked tongue of the snake is preserved next to a huge kantharos standing on the second of three encircling lines of the underside. On both sides of the kantharos a dot-rossette and below the handle an ivy-leaf. On the other side double vine-tendrils with red-speckled bunches of grapes and five-pointed leaves. Underside black with two encircling bands.

**10.** Fragment of the wall of a large cup, restored from two fragments. *Fig. 11*. Inv. no. 6129. 14.8 x 15.0, Th. 0.6 (next to foot) – 0.9 (next to handle-attachment). Small part of black rim. Underside with black zone and three encircling bands. In handle-zone part of the coiling body of a big snake with white belly and white scales in the shape of half circles (partly faded). The head of the snake is above a cup on a high foot (standing on the second encircling band of the underside). In the coils of the body of the snake are a kalyx-krater, a bunch of grapes, an ivy-leaf and a dot-rossette. *MNIR XXXVIII*, N.S. 3 (1976) 13, Pl. 5, 2 (only the upper fragment).

**11.** Fragment of the wall of a cup, with attachment of foot. *Fig. 12*. 11.5 x 7.0, Th. 0.8 (near foot). On underside black zone with two encircling bands. In handle-zone a kantharos on a high foot (upper part is missing) standing on outer band of underside, between two small upcurling snakes. To the left one coil of the body of a huge snake with red belly on which white dots; on the upper body of the snake white, v-shaped ornaments. Bunches of grapes or leaves, decorated with white dots, as filling-ornaments.

**12.** Fragment of the wall of a cup. *Fig. 13*. 9.0 x 10.5, Th. 0.9-0.3. In the handle-zone a free-floating kantharos on a high foot (upper part missing) above the black zone of the underside. To its right a large black droplet and part of a big coiling snake, its head looking to the kantharos.

**13.** Fragment of the rim and wall of a cup. *Fig. 14*. A second fragment, reproduced on *Fig. 14* which may belong to the same cup, is not catalogued here. H. 4.8, H. of rim 2.1, Dm. estimated 19.0. Black rim. In the handle-zone one handle and part of the wall of a kantharos. A small snake with outstretched forked tongue looks into the kantharos. Behind the snake a bunch of grapes (white dots indicating the grapes) and small part of the body of another small snake.

**14.** Fragment of the rim and wall of a cup. *Fig. 15*. H. 6.0, W. 8.0, H. of rim 2.3. Rim has black band at lip, otherwise reserved. In handle-zone upper part of a kantharos and almond-shaped leaves on both sides of the kantharos (rather worn).

## Group III

**15.** Fragment of the rim and wall of a cup. 8.0 x 9.5. Rim black except for a reserved band at the lower end. Black zone with three black encircling bands on underside. In handle-zone a bigger and a smaller snake coiling to the r. in part preserved. An ivy leaf under the head of the bigger snake. There is an almond-shaped leaf in his first coil as there is one above the small one. White dots on the bodies. *MNIR XXXVIII*, N.S. 3 (1976) 13, Pl. 6, 1a.

**16.** Fragment of the rim and wall of a cup. H. 5.8, W. 8.0, Th. 0.6-0.4 (at rim). Black rim. In the handle-zone two coils of a big snake; purple on its back. A dot-rossette in every coil. *MNIR XXXVIII*, N.S. 3 (1976) 13, Pl. 6, 1b.

**17.** Fragment of the rim and wall of a cup. *Fig. 16*. H. 4.5, W. 10.0, Th. 0.4. In handle-zone big coiling snake with a strange dog-shaped head (cf. no. 6, *Fig. 5*). A big round object decorated with white dots (a bunch of grapes?) in front of the snake's head. Black droplets between the coils.

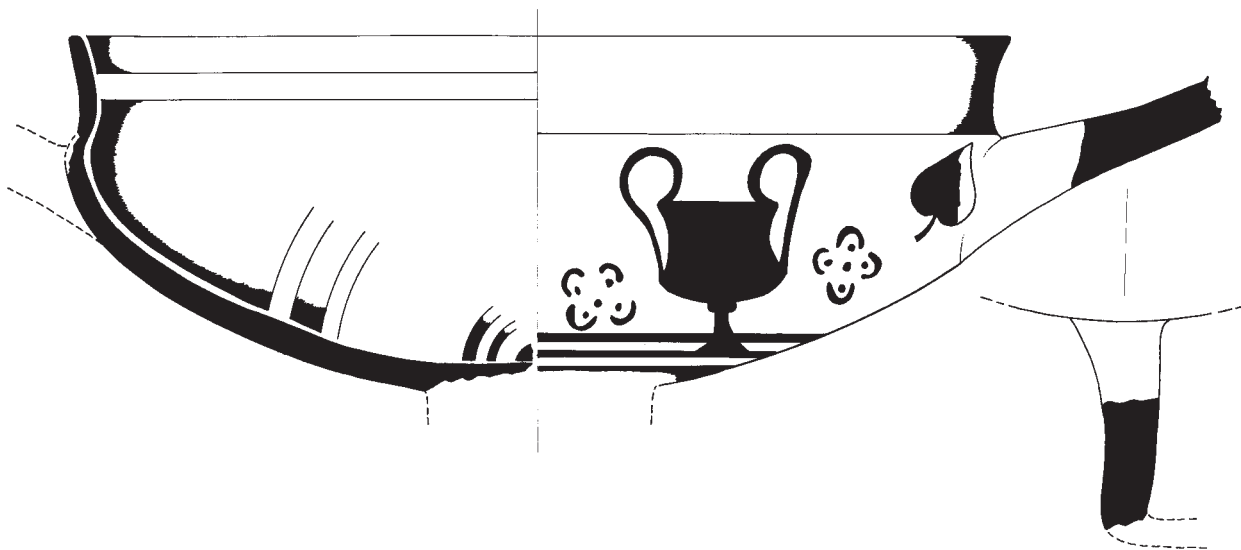
**18.** Fragment of the wall of a large cup. *Fig. 17*. 13.0 x 8.0, Th. 1.0 (at the foot) – 0.7 (to the edge). Black zone around foot. In handle-zone three coils of a big snake in part preserved. Between the coils three zigzag lines (degenerated bunches of grapes or leaves).

**19.** Fragment of the rim and wall with one complete handle of a cup. *Figs. 18-19*. H. 5.2, Dm. estimated 16.0. Rim black, except for reserved band at join with wall. Handle black except for reserved zone at each attachment. Underside black. In handle-zone parts of big snake and degenerated bunches of grapes; below handle droplets or leaves.

**20.** Fragmentary cup: more than half of the body with one complete handle and the foot preserved. *Figs. 20-21*. H. 7.5, H. of foot 2.6, Dm. 16.0, Dm. of foot 4.4. Rim, foot, handle and underside of wall black. In handle-zone a snake-like branch, from which bunches of grapes hang down.

**21.** Complete body of a cup, some damage at rim, handles and foot missing. *Figs. 22-23*. H. 6.0, Dm. 14.8. Rim black. Underside has black zone with three encircling lines. In handle-zone coiling branch with ivy-leaves and fruits (in the shape of dot-rossettes).

**22.** Foot and part of the wall of a cup. *Figs. 24-25*. H. 7.8, H. of foot with fillet at join with wall 7.0. Dm of foot at base 8.0. Black, purple and white circle bands on inside of wall. Purple on fillet at join with wall. White line on black halfway down the foot. Edges of foot at outer face white and purple, at inner face purple and black and white bands.



*Fig. 9. Sparta, Museum, fragments of a cup, cat.no. 9, profile drawing.*



*Fig. 10. Sparta, Museum, fragments of a cup, cat.no. 9.*

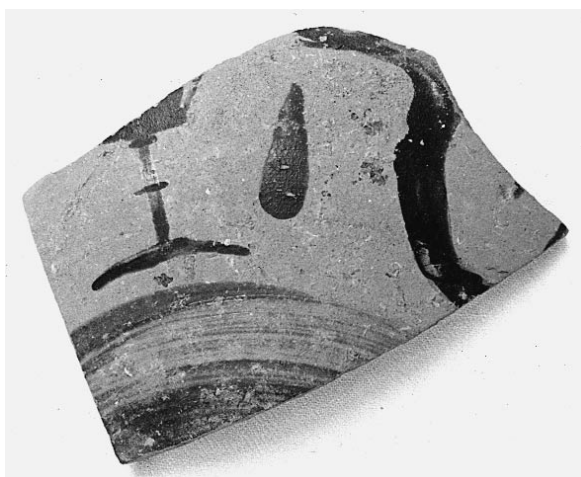




*Fig. 11. Sparta, Museum 6129, fragment of a cup, cat.no. 10.*



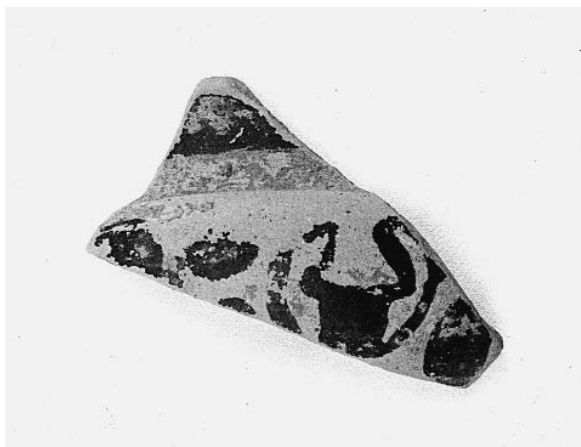
*Fig. 12. Sparta, Museum, fragment of a cup, cat.no. 11.*



*Fig. 13. Sparta, Museum, fragment of a cup, cat.no. 12.*



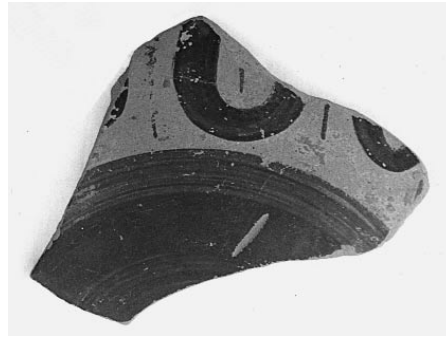
*Fig. 14. Sparta, Museum, fragment of a cup, cat.no. 13.*



*Fig. 15. Sparta, Museum, fragment of a cup, cat.no. 14.*



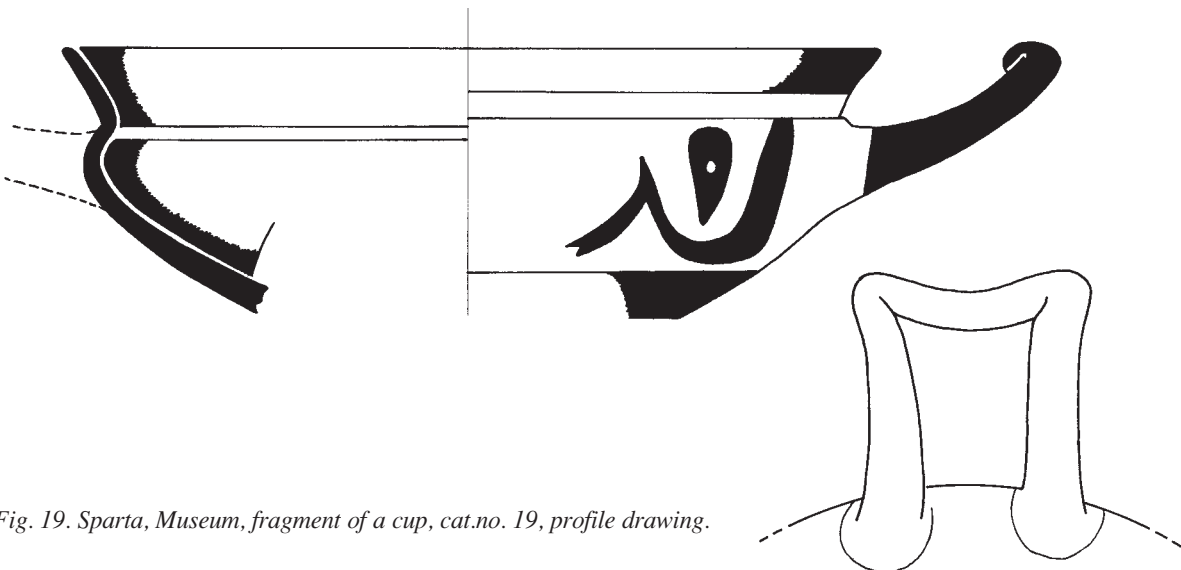
*Fig. 16. Sparta, Museum, fragment of a cup, cat.no. 17.*



*Fig. 17. Sparta, Museum, fragment of a cup, cat.no. 18.*



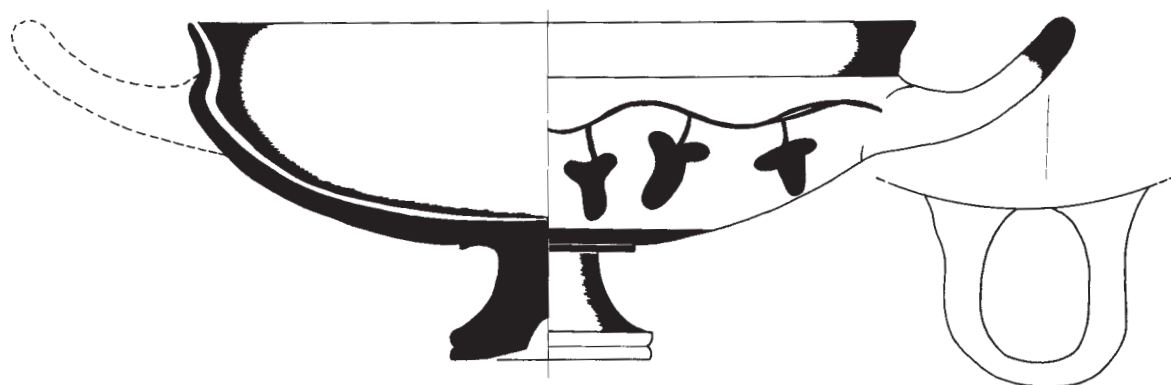
*Fig. 18. Sparta, Museum, fragment of a cup, cat.no. 19.*



*Fig. 19. Sparta, Museum, fragment of a cup, cat.no. 19, profile drawing.*



*Fig. 20. Sparta, Museum, fragmentary cup, cat.no. 20.*

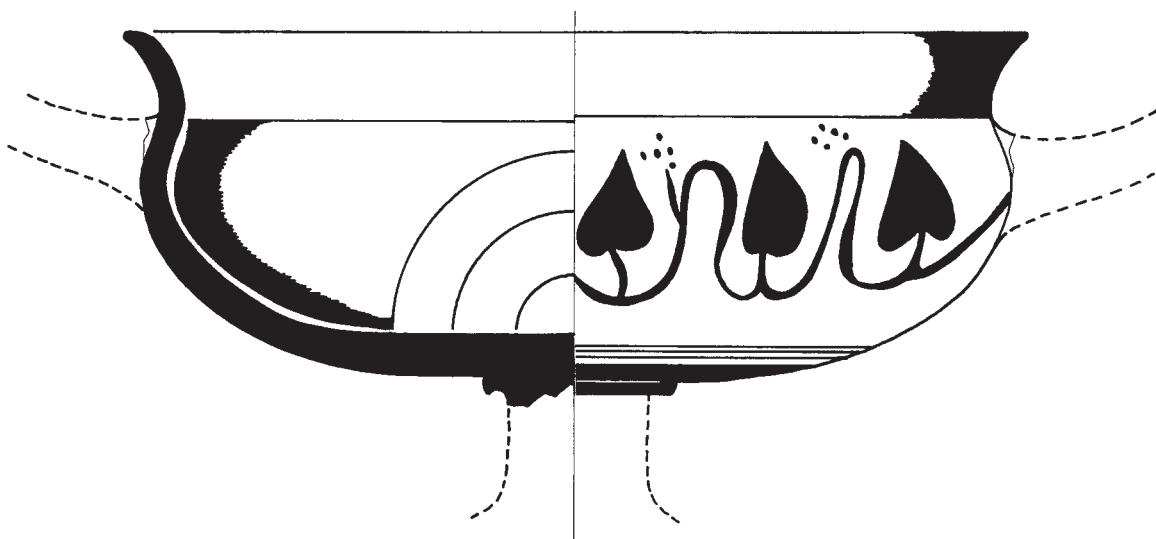


*Fig. 21. Sparta, Museum, fragmentary cup, cat.no. 20, profile drawing.*



*Fig. 22. Sparta, Museum, fragmentary cup, cat.no. 21.*

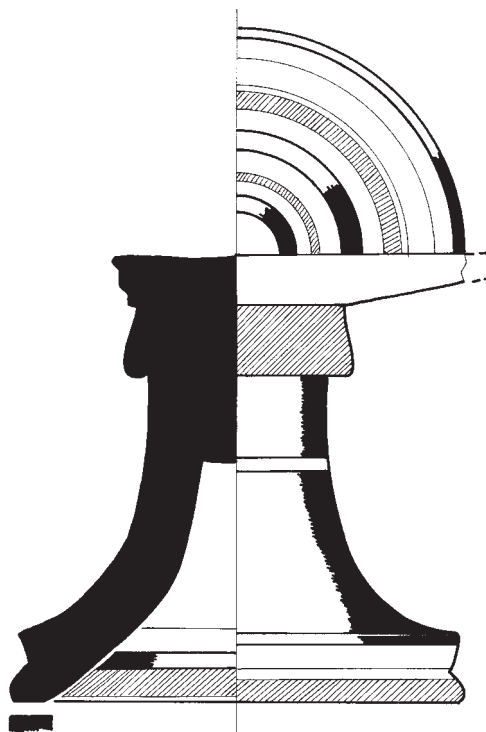




*Fig. 23. Sparta, Museum, fragmentary cup, cat.no. 21, profile drawing.*



*Fig. 24. Sparta, Museum, foot of a cup, cat.no. 22.*



*Fig. 25. Sparta, Museum, foot of a cup, cat.no. 22, profile drawing.*

### III. ARCHAIC BRONZE HYDRIAE

After the publication of my article on “Archaic Bronze Hydriae” in *BABesch* 67 (1992), 1-62, a few other handles of bronze hydriae came to my attention<sup>1</sup>. These handles are of considerable importance as they add new aspects to the hydriae hitherto known. I shall also take this opportunity to add some pieces of lesser importance and to correct some errors in my first article.

#### 1. THE ROSENBAUM HYDRIA (Figs. 1-9)

Whereabouts unknown. Formerly in the art market Ascona (Rosenbaum) and in New York (Hesperia Art). Provenance: allegedly from Greece (Peloponnese). The mouth, the neck, the beginning of the shoulder, the handles and the foot are ancient, the rest is modern restoration. H. 43.8, H. of foot 2.7 – 2.8, H. of the vertical handle 15.2, Dm. of the mouth 28.0 – 28.3, Dm. max. 36.2, L. of horizontal handles 13.5 (left) and 13.75 (right) cms. The patina turns from dark grey-brown to green and bluish-green. For further technical information the reader should consult the contribution of the restorer, Klaus Sommer, in the present volume.

*Hesperia Arts Auction Ltd*, New York, 27 November 1990, no. 10.

This hydria can be linked up, without problems, with the so-called Telesstas series, which comprises, at the present state of our knowledge, ten pieces<sup>2</sup>. Of these ten, two are classed as “related” because of some unusual features<sup>3</sup>. The standard type includes a female protome with a polos between half-reels, snakes at the upper attachment of the vertical handle, and ducks’ protomes between half-reels at the horizontal handles. The “Rosenbaum” hydria, to give this hydria a name and commemorate its first distinguished dealer<sup>4</sup>, represents a variant type, inasmuch as we find lion protomes rather than snakes at the upper attachment of the vertical handle. But there are more details for which the Rosenbaum hydria deserves closer scrutiny.

#### *The female protome*

The elongated, almost triangular face shows rather large, bulging eyes, almost without eyelids, under carved eyebrows, a long powerful nose (Fig. 5), a broad smiling mouth and a rather pointed chin. A low, broad polos with short, vertically carved rods, rising from a horizontal straight band, leaves just

enough space for the indication of hair by a zigzag line on the forehead. Small round ears are pressed forward by the mass of six braids on each side of the face falling down on the chest. The braids are horizontally or obliquely notched. Some kind of collar seems to be carelessly engraved on the neck. Among the extant standard handles with a female protome no exact parallel to this piece survives. Even a handle in the Louvre (Fig. 10)<sup>5</sup>, which comes rather close to this handle, shows many details which point to a later stage in the development of the type<sup>6</sup>.

We can get a little closer by comparing this piece with the two handles mentioned above which were classed as “related” to the standard type because of their unusual features. The first piece, belonging to a fragmentary hydria in Nîmes (Fig. 11)<sup>7</sup>, has much the same lengthy, triangular shape of face and an equally straight horizontal and low polos<sup>8</sup>. But other details, such as the eyebrows, the ears and the braids, again point to a later production date<sup>9</sup>. The second piece, a handle from Olympia<sup>10</sup>, would represent a slightly earlier stage than the one in Nîmes<sup>11</sup>.

When we seek comparisons with an earlier generation of female protomes, we find that no hydria

<sup>1</sup> I thank Klaus Sommer (Cavigliano) for drawing my attention to hydria no. 1 and for the photographs from his files of the same hydria. I also have to thank Dr. Michael Padgett (Princeton) for information and photographs of handles nos. 2a and 2b, and Mr George Ortiz (Geneva) for permission to publish no. 5. The archaeological authorities in Delphi, Olympia, and Sparta gave me permission to study the hydria handles and other bronzes in their museums and storerooms, for which I want to thank them again.

<sup>2</sup> Stibbe 1992, 11ff., nos. C1-C10.

<sup>3</sup> Stibbe 1992, nos. C9 and C10.

<sup>4</sup> See the biography by Peter Kamber, *Geschichte zweier Leben – Wladimir Rosenbaum & Aline Valangin*, Zürich<sup>3</sup> 1990.

<sup>5</sup> Stibbe 1992, 12, 54 no. C3.

<sup>6</sup> The face is more oval, the eyebrows more emphasized, the forehead with hair curls and the polos are higher, and there are only four braids on each side of the face. In comparison with the Telesstas handle in Mainz however (Stibbe 1992, Figs. 17, 18), we may note that on the Louvre handle the base of the polos is still straight (not curved) and the setting of the braids more distant from the head, whereas the hair on the forehead is of the snake-type, not undulated as on the later handles.

<sup>7</sup> Stibbe 1992, 13, 54 no. C10.

<sup>8</sup> On the polos see Marangou 1969, 92.

<sup>9</sup> The stiffly spreading braids falling down from below the ears and the heavy eyebrows are significant.

<sup>10</sup> Stibbe 1992, 13, 54 no. C9: perhaps not a hydria handle but an oinochoe handle.

<sup>11</sup> Herfort-Koch 1986, 14ff. no. K14, Pl. 2.1. The hydria in Nîmes is usually dated much later (Rolley 1982, 35: “vers 570”), especially for the type of the couchant lions at the rim (Herfort-Koch 1986, 16). I prefer a date early in the first quarter of the sixth cent. The only reliable dating we have so far for the early hydriae depends on two pieces found with a Middle-Corinthian context in a grave at Capua: Stibbe 1992, 2, 6, 12 nos. A1 and C2.



Fig. 1. The Rosenbaum hydria, whereabouts unknown.

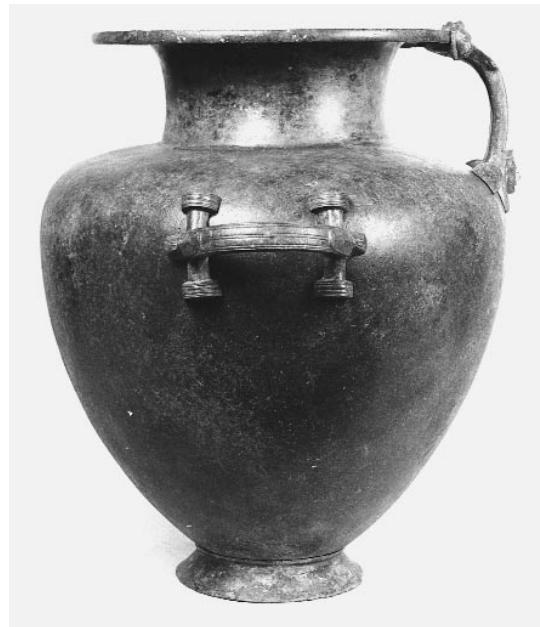


Fig. 2. The Rosenbaum hydria, whereabouts unknown.

handles survive<sup>12</sup>. We reach the middle years of the Daedalic style, around 650-630 B.C., represented in stone sculpture by the “dame d’Auxerre” and the female figure in relief found at Mycenae<sup>13</sup>. From this period many comparable examples from the minor arts are known, including some from Sparta. I refer to a mask of hammered bronze from the sanctuary of Artemis Orthia<sup>14</sup> and to a pair of ivory and bone reliefs from the same find place<sup>15</sup>. They all show an earlier stage in the development of the female busts in comparison with the Rosenbaum hydria.

In conclusion we may state that this protome represents a generation which lies between the earliest examples of the Telesstas series (from about 610-590) and the latest of the middle-Daedalic protomes (from about 650-630). As such it is the earliest hitherto-known example of a female bust on a bronze hydria. Let us see whether the other decorations agree with this early date.

#### *The lion protomes (Fig. 6)*

Lion protomes in general are a very common decoration on bronze and clay oinochoae<sup>16</sup>. On hydriae, however, both in bronze and in clay, they seem to be exceptional<sup>17</sup>. In principle there may be no great difference between a protome and a complete lion’s face. For typological purposes they should

be considered together. Generally one could suppose that the lion protomes belong mainly to an early stage in the development of the bronze hydriae<sup>18</sup>. The lion protomes on the Rosenbaum hydria are distinguished by their clear and clean design. Round ears are set in a notched ruff that

<sup>12</sup> One exception being, probably, a handle in Olympia of bronze sheet, Gauer 1991, 290 no. Var 3, fig. 27, 1; Pl. 116, 4-5, dated about 640.

<sup>13</sup> R. Lullies and M. Hirmer, *Greek Sculpture* (1957) Pl. 6, 7.

<sup>14</sup> Herfort-Koch 1986, 14, no. K16, dated 640.

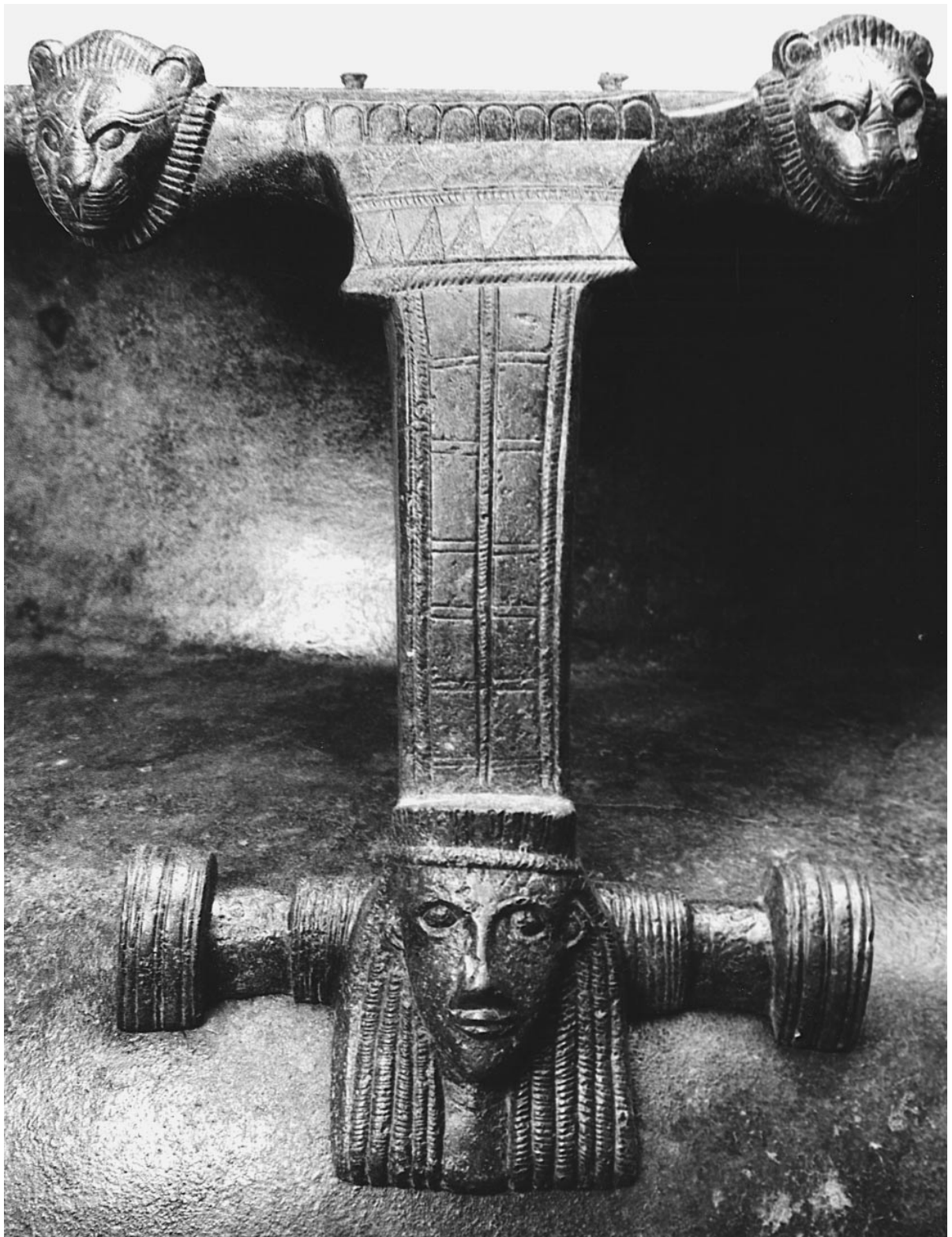
<sup>15</sup> Marangou 1969, 91-92 no. 39, fig. 65, dated about 650; *ibid.* 133 no. 80, Fig. 100; 141 dated “in das Ende der 50er Jahre” of the seventh cent. For the shape of the face one could also compare bronze female heads from Sparta (Rolley 1982, fig. 142; *BCH* 62, 1938, 324 fig. 12), in Berlin and in Karlsruhe (J. Dörig, in: *Funde und Forschungen, Festschrift B. Neutsch*, 1980, 111f. with figs. 25, 27 and 21,8) and terracotta protomes (P. Amandry, *Vases, Bronzes et Terres cuites de Delphes*, *BCH* 62, 1938, 322-326, figs. 11, 13, Pl. 37, 2).

<sup>16</sup> Weber 1983, 46-49.

<sup>17</sup> I know of only four examples on hydriae of standard type and two on hydriae of amphora shape; one on a clay hydria (see next note).

<sup>18</sup> Stibbe 1992, 7 no. B2 (end of the first quarter of the sixth cent.); 10-11 no. B9 (first quarter); 15 no. D4 (first quarter); 48 no. N2 (570-560); 49 no. N5 (560-550). There is another hydria handle with lion protomes, from which the lower part is missing; it is dated about 550 by Gauer 1991, 260 no. Hy 22, Pl. 10, 3; 89, 1; 90, 3. Lion protomes are also found at the rim of a clay hydria decorated by the Hunt Painter, in Rhodes, dated 555-550 (Stibbe LV, 124, 137f. no. 219, Pl. 76).





*Fig. 3. Vertical handle of the Rosenbaum hydria, whereabouts unknown.*

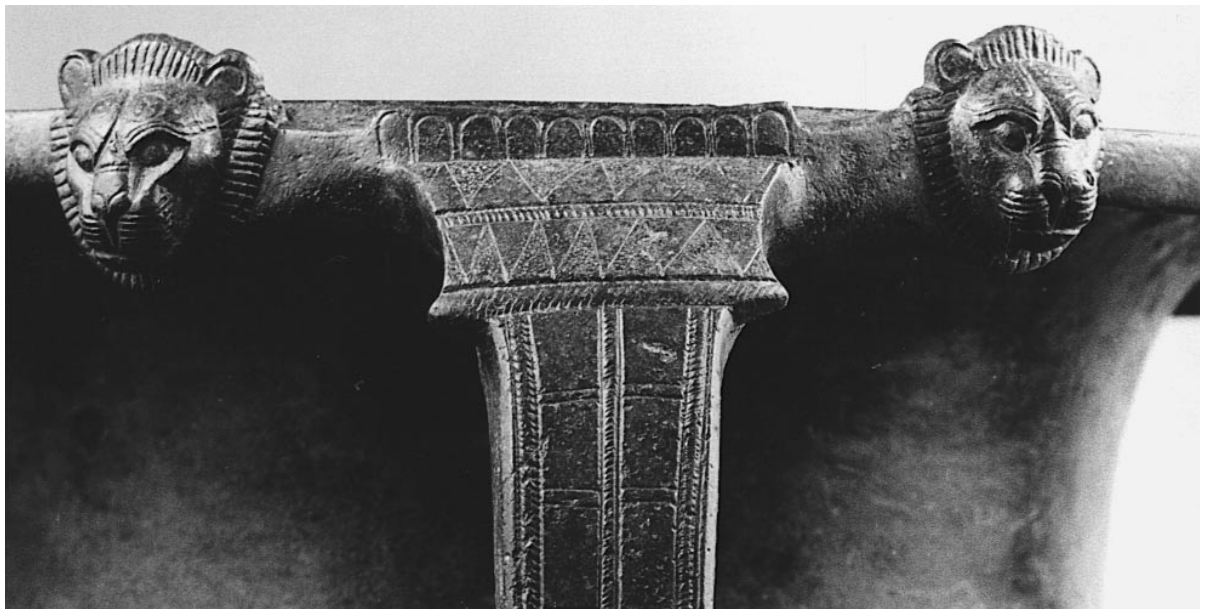


*Fig. 4. Detail of vertical handle of the Rosenbaum hydria.*



*Fig. 5. Detail of vertical handle of the Rosenbaum hydria.*





*Fig. 6. Detail of vertical handle of the Rosenbaum hydria.*



goes around the head. The bulging eyes are obliquely carved under lengthy eyebrows, which, in a pair of engraved wavy lines, finish below the ears. A deeply-cut triangle between the eyes running upwards from the nose divides the forehead in two parts. On both sides of the dividing line a volute hangs down above the eyebrows. The nose and muzzle are also carefully incised with straight or curving lines.

This type of lionhead betrays dependence on Assyrian prototypes (Gabelmann 1965, 40f.). It is encountered with almost the same characteristics on a hydria handle in Munich which has been assigned to the first quarter of the sixth century (Stibbe 1992, 10f., 53 no. B9, Fig. 14). An interesting variant is found with a lion protome at the upper end of an oinochoe handle in Mainz (Weber no. I.A.1, here Fig. 12). On the forehead the incised hanging volutes are turned upside-down and connected by a row of leaves so as to constitute a standing palmette. The face of the lion is otherwise rather different, but some details of the decoration of the grip (as we will see below) and above all of the palmette at the lower attachment<sup>19</sup> reinforce the impression that all these handles were produced, if not by the same artist, than at least in the same workshop at about the same time<sup>20</sup>.

#### *The grips and the foot*

The vertical grip of the Rosenbaum hydria has the robust flat shape which we already know from other examples dating from the first quarter of the sixth century<sup>21</sup>. Also the decoration of the top (Fig. 6) with a frieze of incised tongues between the lion protomes and two friezes of incised triangles divided by notched bands below, are of the common taste of the time. The hanging and standing triangles in the upper and lower frieze respectively, however, are emphasised by stippling in the present case. The shape of the grip is unusual insofar as the upper part is isolated from the rest by its trapezium-like shape. The division of the lower part of the grip into quadrangular compartments by double incised horizontal lines between notched vertical ribbons also betrays the individual style of the artist<sup>21a</sup>.

The grips of the horizontal handles (Figs. 7-8) are of the same type. Here we find, at the attachments, the ducks' heads which remained one of the characteristic features for Laconian bronze hydriae during the first half of the sixth century. In the present case the ducks are distinguished by their robust and at the same time refined rendering (note the notched band at the join of the head and the beak, and the notched eyebrows) if compared with later generations<sup>22</sup>.

The foot (Fig. 9) is low and flaring like the feet of early claykraters<sup>23</sup>, and is plain. At the join with the body there is a fillet decorated with groups of oblique incised lines, comparable to the groups with fishbone-pattern on the handle of the bronze oinochoe in Mainz (Fig. 12).

#### *The shape (Figs. 1-2)*

The restoration of the body of the Rosenbaum hydria is an excellent piece of work by the restorer Klaus Sommer (for his report, see below). The result is trustworthy and confirmed by the comparison with the body-shape of the earliest preserved bronze hydriae: those in Oxford, in Pesaro and in Bern<sup>24</sup>. The decisive features are the rather low, slightly concave and broad neck, the round shoulder and bulky body with a low, flaring foot<sup>25</sup>. The actual shape of the Rosenbaum hydria gives no clue to its being the earliest in the series, but nor does it contradict this possibility.

#### *Conclusion*

The analysis of the decoration and shape of the Rosenbaum hydria has shown that it is one of the earliest, if not the earliest, of the whole series of Greek bronze hydriae of which we know. There is in the decoration of the handles an element of

<sup>19</sup> The palmette of the oinochoe in Mainz with its sophisticated incised details reminds one of the incised palmettes of a handle in Munich (Stibbe 1992, no. B9) and of a handle in Olympia (Stibbe 1992, no. B10), where the same incised details, cross-hatched zones from which palmettes with rounded leaves spring, suggest an earlier dating than the one proposed by Gauer 1991, 260: about 550, that is in the first quarter of the sixth cent. at the latest.

<sup>20</sup> There is a seated Laconian bronze lion statuette from Olympia in Athens with the same type of incised hanging volutes on the forehead as the lion protomes of the Rosenbaum hydria and the handle in Munich (Gabelmann 1965, 72, Pl. 12, 1-3), which I would date at the end of the first quarter of the sixth cent. (see C. M. Stibbe, *Eine archaische Bronzekanne in Basel*, *AntK* 1994, 113 n. 35). It may represent an offshoot of the tradition which began with the Rosenbaum hydria.

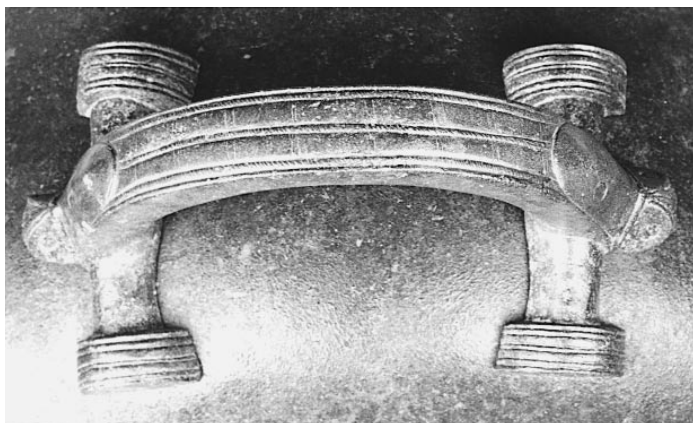
<sup>21</sup> See e.g. the handles Stibbe 1992, C1 Fig. 16, C3, here Fig. C5, Fig. 17, C8.

<sup>21a</sup> A very similar way of dividing larger surfaces into squares and ribbons is encountered on the long robes (chitons) of several Laconian bronze statuettes of goddesses. They seem to belong to the same time and the same ornamental tradition and may be the products of the same workshop: one from Olympia, of which the head is missing (Herfort-Koch 1986, 86 no. K28, Pl. 3, 3-7); one Athena Promachos, allegedly from Selinunte, in the collection of G. Ortiz, Geneva (*Art Antique*, Cat. no. 167. *Hommes et Dieux*, Cat. no. 2. *Goddess and Polis*, Cat. no. 2, p. 146, ill., coll. 128. The George Ortiz Collection, Cat. St. Petersburg and Moscow, 1993, no. 126); one on a handle of a bronze hydria from Grächwil, in Bern (Stibbe 1992, 20-22, 55 no. G1, Fig. 32).

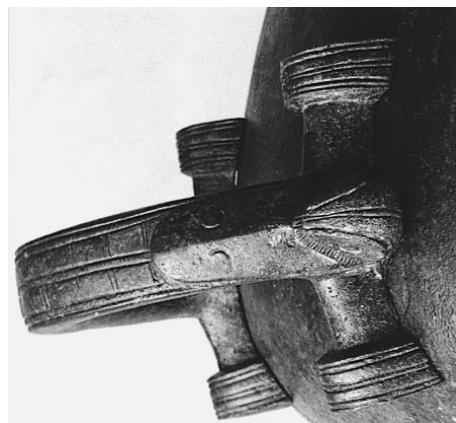
<sup>22</sup> See e.g. the ducks on the handles of the Paestum-Sala Consilina series (Rolley 1982, Pl. IX).

<sup>23</sup> See e.g. Stibbe 1989, B29 Fig. 13; F3 Fig. 43; F6a Fig. 44.

<sup>24</sup> Stibbe 1992, B1 Fig. 8; G2 Fig. 33-34; G1 Fig. 35.



*Fig. 7. Horizontal handle of the Rosembaum hydria.*



*Fig. 8. Horizontal handle of the Rosenbaum hydria.*



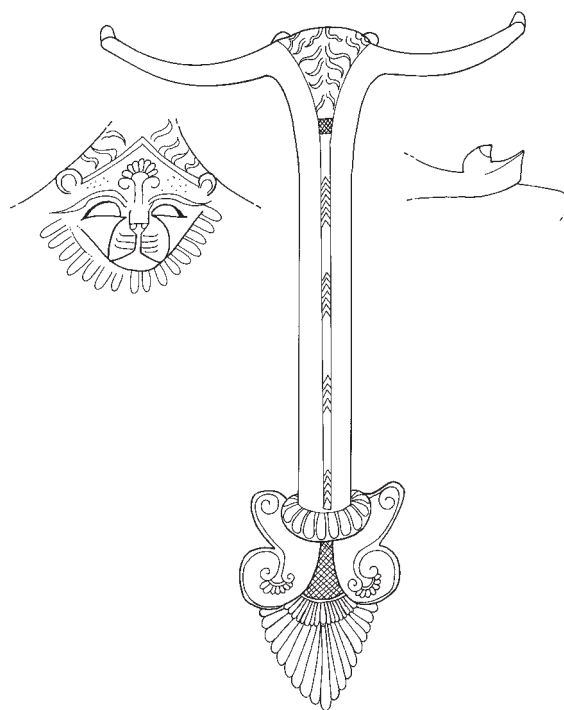
*Fig. 9. Foot of the Rosenbaum hydria.*



*Fig. 11. Nîmes, Musée Archéologique, lower part of the vertical handle of a bronze hydria.*



*Fig. 10. Paris, Louvre B2 2645, vertical handle of a bronze hydria.*



*Fig. 12. Mainz, Römisch-Germanisches Zentralmuseum O, 15 422, handle of a bronze oinochoe.*

draughtsmanship which is also characteristic of a few other handles of early date. An intimate connection with the Telesstas series, on whose Laconian origin a *communis opinio* prevails among scholars, would suggest that the Rosenbaum hydria was also produced in Laconia. The female head at the bottom of the vertical handle alone, if compared with the Telesstas series and with the predecessors of the woman's protome in general, would point to a date of origin between 630 and 610 B.C.

## 2. TWO HANDLES IN PRINCETON (Figs. 13-14)

*a* Princeton, The Art Museum Princeton University acc. no. y1988-1. Provenance unknown. Museum purchase, Carl Otto von Kienbusch Jr. Memorial Fund.

Bronze handle with a twisted grip. H. 23.5, Dm. of the rim est. 11.4 cms. At the lower attachment a gorgoneion flanked by couchant lions. Between the lions and above the gorgoneion a band of pearls which serves as a base for the grip. At the upper attachment couchant rams divided by a frieze of standing tongues. The rams are placed on the prolonged arms of a volute, which is attached to the grip below them.

Record of the Art Museum, Princeton University 48 (1989-1) 53-54 (Fig.).

*b* Princeton, The Art Museum Princeton University acc. no. y1990.83. Provenance unknown. New York art market, Museum purchase, gift of Joyce von Bothmer.

Fragment of the lower attachment of a bronze handle. H. 9.8, W. of gorgoneion 6.4. Duplicate of *a*. Most of the gorgoneion, small parts of the band of pearls and the grip above it and of the hindquarters of the couchant lion to the right preserved.

*Hesperia Arts Auction Ltd.*, New York, 21 November 1990, no. 7.

Pending the official publication of the two pieces<sup>26</sup>, a few observations may suffice here. Although composed of well-known elements, handles *a* and *b* are bound to revolutionise our present state of knowledge and insight into the production of Greek bronze vessels, especially of bronze hydriae, if indeed, these handles belong to hydriae. In fact there is nothing to compare with handle *a* as a whole. But before we try to explain the handle as such, we must have a look at the individual parts.

### *The gorgoneion*

As usual with hydriae, the lower attachment of the vertical handle bears the most important part of the decoration, i.e. the gorgoneion. The face is very

broad and low and, apart from the pointed chin with beard, is almost quadrangular<sup>27</sup>. Large bulging eyes are surrounded by deeply carved notched eyelids and eyebrows. Between the eyebrows there is a drop-like wrinkle. The nose is short and broad with wide open nostrils. A distended mouth shows horrifying double tusks in the corners and an outstretched tongue in the centre. Horns spring from the edges of the low forehead, just above the ears. Six curling locks fall in a straight horizontal line between the horns on the forehead. The modelling of the ears is very simple: a central knob surrounded by a flat shell. Three notched braids hang down from behind the ears on each side of the face. It is not difficult to recognise here the monstrous elaboration of the female protomes of the first quarter of the sixth century B.C., which are known, as far as the bronze hydriae are concerned, to belong to the Telesstas series<sup>28</sup>. Here we have the same characteristics of brows emphasised by notching<sup>29</sup> and hair arranged into ropelike braids to right and left of the face, with every braid being notched diagonally in the opposite direction to the next<sup>30</sup>. The shape of the eyes and the low forehead are traits common to both this gorgoneia and the female busts<sup>31</sup>.

Since the Telesstas series is generally regarded as Laconian, we have made a first step not only towards dating handles *a* and *b*, but also towards establishing their place of origin.

Let us see if we can find other arguments in favour of this first impression. Among the hydria handles decorated with a gorgoneion at the lower attachment, only two are comparable. One is in Harvard, allegedly from Greece (Stibbe 1992, 29, 56 no. G10, here Fig. 15): the gorgoneion is surmounted by a female bust of the type of the Telesstas series; the other is in Sofia, from a grave at Trebenischte

<sup>25</sup> The comparative drawing Stibbe 1992, Fig. 35 shows that at the end of the first quarter of the sixth cent. the neck of the hydriae (represented by B1 in Berlin) becomes broader and straighter, the shoulder and body less rounded and the foot less flaring.

<sup>26</sup> D. G. Mitten was entrusted with the official publication by the Museum authorities. His publication is expected to appear in the Record of the Princeton Art Museum. I thank him and M. Padgett for permission to include the Princeton handles in this Addendum.

<sup>27</sup> An individual touch of the artist seems to be the rendering of the plain beard, whose contour starts below the horns and describes a zig-zag line towards the cheek and around the mouth to the point of the chin.

<sup>28</sup> Stibbe 1992, 11-13, nos. C1-C10 and below no. 5.

<sup>29</sup> Stibbe 1992, 12 no. C1, Fig. 16; no. C10, here Fig. 11; cf. no. D4, Fig. 22, no. G10.

<sup>30</sup> See e.g. Stibbe 1992, 12 no. C1, Fig. 16; no. C5, Figs. 17-18; Fig. 16 no. C6, Fig. 19; 20 no. F10, here Fig. 17.

<sup>31</sup> See e.g. Stibbe 1992, 12 no. C1, Fig. 16; no. C3, here Fig. 11; no. F10, here Fig. 17.





*Fig. 13. Princeton, The Art Museum y1988-1, bronze handle.*



*Fig. 14. Princeton, The Art Museum y1990-83, fragment of a bronze handle.*

(Stibbe 1992, 48, 60 no. N1). Both handles belong to hydriae of uncommon character: the one in Harvard is part of a composite handle of the type Grächwil-Treia; the other is attached to a hydria of unusual shape. The faces of both are of the early square Laconian type, as defined by Rolley (Rolley 1982, 63f.). When compared with the Princeton handles, they are less low and broad, the eyelids are more rounded, the noses longer and the mouths less wide, the braids are only two in number and fall straight down from behind the ears. These differences should indicate an earlier date of production for the Princeton handles. The Trebenischte handle, with its plain rendering of the ears and the notching of the eyelids and eyebrows, is a little closer to the Princeton handles than the Harvard handle, which has a more elaborated type of ears and no notching. As a result I would date the Princeton handles about 600-590, the Trebenischte handle 590-580, and the Harvard handle 580-570. As for their origin, the type of the gorgoneia which have been mentioned above points clearly to Laconia, even if the prototypes are Corinthian<sup>32</sup>. Details which have been recognised as typically Laconian are: the wrinkle on the forehead between the eyebrows (clearly visible on all three handles), the wrinkled nose (on two of them), the heavy emphasising of the eyelids and eyebrows, either by notching (as on the Princeton and Trebenischte handles) or by plastic elaboration and carving (as on the Harvard handle), and the horns (on all three)<sup>33</sup>. The Laconian tradition of dressing a gorgoneion up with horns goes back to the seventh century B.C.<sup>34</sup> It is found mainly in plastic art, for instance on the superb terracotta gorgons in Tegea and in Basel (Fig. 16) dated in the third quarter of the seventh century<sup>35</sup>. Much later, about 575, when Laconian vase-painters develop their own school of black-figure painting, they adopt the Corinthian type of gorgoneia of their own time, with a rounded face instead of a square one and without horns, but retaining in many cases the wrinkles between the eyebrows and on the nose<sup>36</sup>. Another feature worth considering is the extremely long pointed chin or beard of both the Princeton gorgoneia<sup>37</sup>. This may be a characteristic of the artist, but some parallels are again found in Laconia, as on a bronze plaque from the acropolis in Sparta (Fig. 17)<sup>38</sup>.

#### *The couchant lions*

On handle *a*, next to the gorgoneion, we find on either side a couchant lion. The lions are of the common Laconian type of the first quarter of the sixth century, recognisable by the radial collar mane which encircles the head, the short and

compact muzzle, the slender neck and the robust, short body<sup>39</sup>. What is surprising is not their type but their location: normally on hydriae couchant lions are placed at the upper attachment of the vertical handle. They have changed places with the couchant rams, which on handle *a* adorn the rim.

#### *The rams*

The rams show the same robust bodies as the lions. Their coats are plain, in contrast to the rendering in the second quarter of the sixth century and later, when the flakes of their coats are incised in different ways<sup>40</sup>. Plain coats are found mainly with rams which belong to early hydriae and oinochoae<sup>41</sup>. The placing of rams rather than lions at the rim may be explained as typical of an early period when the canonical solution was still to be found. We know of one more example, a handle from Italy, now in the Louvre (Fig. 18)<sup>42</sup>. Here the rams have the same plain coats, the lions are of the same Laconian type, as is the early female protome which adorns the lower attachment<sup>43</sup>.

<sup>32</sup> On the possible invention at Corinth see H. Payne, *Necrocorinthia* (1931) 79ff.

<sup>33</sup> For the association of horns with Laconian gorgoneia, see Pipili 1987 18 with note 154 for references.

<sup>34</sup> There is one isolated Protocorinthian example: Payne o.c. (above note 32) 80 fig. 23, A. For the Laconian type see Marangou 1969, 43f, 75ff. and the clay plastic heads in *BSA* 34 (1933/4) Pl. 31b, d.

<sup>35</sup> *Antike Kunstwerke aus der Sammlung Ludwig, II, Terrakotten und Bronzen* (1982), 10-13, no. 80 (H. Herdejürgen) with frontispiece (colour print). There is also a fragment of such a plastic vase in Sparta: *BSA* 15 (1908/9) 119, fig. 2, 4 and Pl. VI, 23, from the Menelaion, dated by context between 620-580.

<sup>36</sup> For a useful survey of the Laconian gorgoneia in vase-painting see Pipili 1987, 14-17, who, however, would "perhaps attribute to South Italy the sixth-century *horned* gorgoneia decorating bronze vessels" (p. 18).

<sup>37</sup> The pointed chin with beard as such is common in both Laconia and in Corinth (see e.g. Payne, o.c., above note 32, 82 fig. 24, B-C; fig. 25, E, but extremes like *ibid.* 82, fig. 24, A are exceptional).

<sup>38</sup> Athens, National Museum X 15917. *BSA* 26 (1923/24) 266-268, Pl. 21 and Pipili 1987, 17 no. 44, fig. 26. Rather similar is a shield device by the Rider Painter, Stibbe 1972, no. 303, Pl. 107, 1.

<sup>39</sup> On the typology of the Laconian lions see Gabelmann 1965, 26-30, 69-73. Gauer 1991, 137-144. C. M. Stibbe, Eine archaische Bronzekanne in Basel, *AntK* 37 (1994), 111-114.

<sup>40</sup> C.M. Stibbe, o.c. (note 39), 114-115.

<sup>41</sup> Rams with plain coats on hydriae: Stibbe 1992, no. E1 (dated about 575; cf. Rolley 1982, fig. 152); E3 (dated 570-560); F10. On oinochoae: see the article in note 40.

<sup>42</sup> Stibbe 1992, 20, 55 no. F10. There are two rather exceptional hydria handles with ram *protomes* at the upper attachment: Stibbe 1992, 46-47, 60 nos. M1 and M3.

<sup>43</sup> In Stibbe 1992, 20 I doubted the origin: could be Corinthian, but Corinthian parallels are lacking.



*Fig. 15. Cambridge, Mass., The Fogg Art Museum, fragment of a bronze handle.*



*Fig. 16. Basel, Antikenmuseum und Sammlung Ludwig Lu 80, plastic vase in the shape of a gorgo.*



*Fig. 17. Athens, National Museum X 15917, bronze plaque from the acropolis of Sparta.*



### *Two minor details*

Some details increase the extravagant nature of handle *a*: the tails of the lions make a free loop towards the braids of the gorgoneion, to which they are attached halfway down<sup>44</sup>. The rams, in turn, are lying on what seem to be the elongated arms (in the shape of snakes) of the volute-disks which are attached below them to the grip<sup>45</sup>. This idea of shaping a base for figures in the shape of snakes by using volutes is found only with the show-handles of the Grächwil-Treia series of hydria handles (Stibbe 1992, 20-32, Group G). On the right side of the gorgoneion at Harvard (*Fig. 15*) such a volute is preserved, as it is, more complete, on the shoulders of a warrior from Treia<sup>46</sup>. So this detail at least gives us another clue to the dating and origin of handle *a*, which, like handle *b*, may be considered a variant belonging to Grächwil-Treia series.

### *The grip*

We have no other example of a twisted grip of this type. From afar we are reminded of the handles of a group of bronze hydriae and amphorae of unusual shape. There we find pairs of oblique incised lines on round grips which suggest a kind of twisting<sup>47</sup>. There is only one example, among the amphorae, which shows a moulding comparable to the one of handle *a* (see below, no. 6). This piece, however, should be dated about a quarter of a century later than the Princeton handles<sup>48</sup>.

### *Conclusion*

In conclusion, then, we may state that the Princeton handles are clear evidence for the highly enterprising and original spirit of the Laconian artists who worked in bronze and produced many amazing experiments around 600 B.C. and during the first quarter of the sixth century<sup>49</sup>. To this extent the Princeton handles can be placed without difficulty into the highly experimental group of the Grächwil-Treia hydriae. They may be considered as variants to that group, because the grip is only twisted and not a figure-composition, as is the rule with the Grächwil-Treia series. They may also serve to refute an old but tenacious misunderstanding that hydriae of this kind would have been produced in the Spartan colony of Taras, where, in fact, nothing of this kind has been found.

### *An afterthought*

The fact that two handles with the same type of gorgoneion were sold on the art market in the same country at about the same period, as happened with the Princeton handles, might cause one to wonder how this curious coincidence came about. The fact that the two handles ended up in the same museum

can be attributed to the alertness of its staff<sup>50</sup>. Beyond this there is still the suspicion that the two handles belong to one and the same vase. There are some arguments in favour of this supposition.

First there is the estimated diameter of the mouth of the vase to which handle *a* belongs. This can be recovered with the help of the curve made by the bodies of the rams which adorned that mouth<sup>51</sup>. The diameter of the mouth of a hydria of standard type is about 30 cms; with the Princeton handle this would be about 11.4 cms. This means that the Princeton handles must belong to two different hydriae or to one and the same amphora of the type with a slender straight neck, which has been treated by me earlier (Stibbe 1992, 47-52, Groups N and Nn. These groups have an average mouth diameter of about 11 cms.). In favour of an amphora we have the identity of the two Princeton handles and the fact that comparable twisted grips are only found on amphorae, as stated above. Against the amphora hypothesis we have the fact that the known amphorae of the group Nn never have rams or other couchant animals at the upper attachment of the handles.

So, finally, it is impossible to decide whether the Princeton handles were once really attached

<sup>44</sup> Such free-standing loops are exceptional, probably for practical reasons: they easily break off. They are found only on a handle in Mariemont (Stibbe 1992, no. E3; here *Fig. 19*) and two others: *ibid.* nos. F10 and G18.

<sup>45</sup> Between the rams a row of four plastic standing tongues is visible. This filling-ornament, on hydria handles, is usually extended to many more tongues; see *e.g.* Stibbe 1992, 14, *Fig. 17*.

<sup>46</sup> Stibbe 1992, G2, G3, G10.

<sup>47</sup> Stibbe 1992, 47-52, Groups N and Nn.; Rolley 1982, figs. 82-84.

<sup>48</sup> We have to move on another half-century to reach the twisted handles of Corinthian origin found on oinochoae of type B, and dated at the end of the sixth cent. through the beginning of the fifth cent. B.C.: Vokotopoulou 1975, Pl. 8 and 12, e.

<sup>49</sup> If we compare handle *a* with the rather long series of hydria handles with a gorgoneion at the lower attachment which, probably at Corinth, suddenly starts to be made about the middle of the sixth cent. (Stibbe 1992, Group I), we must admit that, apart from the exchange of the rams and the lions, the idea is much the same. Even the type of gorgoneion looks as if it was a distant offshoot of a Laconian prototype (Stibbe 1992, 42). Perhaps the case exemplifies how the Corinthian bronze industry, which started a new life after 550, took over many ideas and types from the Laconian bronze industry, which slowly declined about the same time.

<sup>50</sup> As M. Padgett kindly informed me in a letter, it was his predecessor at the Princeton Art Museum, Robert Guy, who bought the corroded fragment *b*, because he saw that it was a close parallel of handle *a*, which was already in the Museum's possession at the time.

<sup>51</sup> I thank M. Padgett for his help in taking the measurements of the curve of the rams in Princeton. He estimates the diameter of the rim as 11.4 cm, that of the neck as 9.8 cm.



*Fig. 18. Paris, Louvre Br 2646, lower attachment of the vertical handle of a bronze hydria.*



*Fig. 19. Mariemont, Musée Royal B 210, vertical handle of a bronze hydria.*



*Fig. 20. Delphi, Museum 6, vertical handle of a bronze hydria.*

together to one and the same vase or not. But the possibility should not be excluded, the more so because they should be dated at least a quarter of a century earlier than their counterparts of the groups N and Nn, that is to a period in which a spirit of free experimentation and invention allowed for many unorthodox solutions.

Whatever may seem the most appropriate solution to this problem, one fact should be stressed: the Princeton handles provide another strong argument for the assumption that the narrow-necked hydriae and amphorae of groups N and Nn originated in Laconia.

### 3. A HANDLE FROM DELPHI (*Fig. 20*)

Delphi, Museum 6. Provenance: Delphi ("Trouvailles de 1892"). Handle of a bronze hydria. Cracks in the lower half. One of two snake protomes at upper attachment missing. H. 16.5, W. of palmette 7.4. Brown patina. Hollow cast, part of filling preserved. Almost round section of grip. Lower attachment has a thick palmette with nine rounded leaves, two round simple volutes evolving from two engraved lines on the grip. Above each volute a pointed projection. At the upper attachment another smaller standing palmette with seven leaves in continuation of an offset broad band on the grip. On each side of the palmette a snake protome looking to the palmette with the top of the head turned towards the viewer (one protome missing).

P. Perdrizet, *Fouilles de Delphes* V (1908), 88 no. 396 with Fig. 294.

The handle belongs to Group B, decorated as it is with a single palmette at the lower attachment (Stibbe 1992, 6-11, nos. B1-B10). The palmette is comparable to one in Olympia (ibid. no. B3) and can be dated in the first quarter of the sixth century. The experimental character of the upper attachment points in the same direction (cf. the same kind of palmette between horse protomes on two horizontal handles in Brussels (Stibbe 1992, 28 Fig. 38). Since snakes at the upper attachment are common in the Laconian Telesstas series (Stibbe 1992, 11ff.), the handle may be of Laconian origin.

### 4. A HANDLE FROM OLYMPIA (*Fig. 21*)

Olympia, Museum Br 11764. Provenance: Olympia ("Nördl. Palästra, 26.3.1880, Streufund").

Lower part of grip and complete lower attachment of handle. H. 10.01, H. of grip 4.0, W. max. of

volutes 9.8. On grip five hanging incised tongues, followed by band of pearls, a ridge and the palmette with eight flat incised leaves with round tips and double volutes.

Gauer 1991, 159, 260 no. Hy 24 (bibl.), Pl. 89, 4b.

In a first evaluation of this fragment I excluded it from my catalogue, "because the upper half, which would be decisive for the identification of the type of handle, is missing; moreover the shape of the lower half is far from canonical" (Stibbe 1992, 8 note 35). I now return to the piece, after autopsy in Olympia and accepting Gauer's assumption that his fragment Hy 25 is to be regarded as part of the grip and the upper attachment of the same handle. I now think that this handle can be placed between the handles with equally incised palmette with round leaves: B1 in Oxford, dated about 600, and B4 in Vienna, dated in the second quarter of the sixth century. Both these have nine incised leaves with rounded tips; the Olympia handle has eight. In all three cases there is no central elongated leaf in the palmette, as is usual in the second half of the sixth century. Moreover the volutes of the Oxford and Olympia handles do not touch each other in the centre, as on B4 and later handles<sup>52</sup>. The Olympia handle is a masterpiece of refinement and should be one of those Laconian predecessors of Group K, which was manufactured in the northern Peloponnese in the second half of the sixth century (Stibbe 1992, 42-44, 59 nos. K1-K5).

### 5. A HANDLE FRAGMENT IN GENEVA (*Fig. 23*)

Geneva, Private Collection George Ortiz. Provenance: allegedly from Thessaly. Lower attachment of the vertical handle of a bronze hydria, including part of the grip. H. 10.0, W. max. 12.0. A gorgoneion (5.0 x 5.5 cms) is surmounted by a pair of rams, which is divided by a row of three balls. Above the balls a rather flat slightly rounded grip (almond-shaped in section) is decorated in the centre with a vertical row of beads. The coats of the rams are finely cross-hatched. The rams lie with their hindquarters on short volutes emerging from the gorgoneion. The gorgoneion has a strong nose wrinkled with oblique lines and surmounted by a drop-like wrinkle. The eyes are

<sup>52</sup> Both characteristics are found on the Pomerance oinochoe (*Master Bronzes from the Classical World*, 1967, no. 77, with frontispiece in colour) which, by Gauer 1991, 159, is called Corinthian and dated 540-520. I would prefer a date around 550-540, because of the style of the kouros, with its stiff and little-developed plastic rendering, like its contour line at the hips.





*Fig. 21. Olympia, Museum Br 11764, lower attachment of the vertical handle of a bronze hydria.*



*Fig. 23. Athens, Museum of Cycladic and Ancient Greek Art 730, bronze hydria.*



*Fig. 22. Geneva, private collection George Ortiz, lower attachment of the vertical handle of a bronze hydria.*

incised, like the eyebrows and the teeth. The forehead has a round upper border consisting of four curls hanging down on either side of a central parting. From behind the flat and unmodelled ears, two braids emphasised by oblique notching and with upcurling ends hang down on either side of the face. Unpublished.

The fragment belongs to Group I (Stibbe 1992, 38-42, 58-59, nos. II – III). The differences with the other handles of this group, however, are obvious. The grip is not trapezium-shaped in section like the others, and there is a vertical beaded band which is missing in the case of the other handles. The hatching of the coats of the rams and the notching of the braids are also different. All these details point to a Laconian origin for the Ortiz handle. A Laconian prototype for the handles of Group I, which is generally identified as Corinthian, was lacking until now, but its existence had been surmised by me earlier (Stibbe 1992, 42).

In addition it should be noted that in the same collection of Mr. George Ortiz there is a fragmentary bronze hydria, which can be considered as the youngest of the Group I series. It dates to the first half of the fifth century B.C. and shows a type of gorgoneion at the attachments of the horizontal handles (four in all) which clearly goes back to the type of Group I. The only important difference is that these have horns. As we have seen above (no. 2, *Fig. 13-14*), horns are typical of the earliest Laconian type of gorgoneia. For this hydria see “The George Ortiz Collection” Catalogue, St Petersburg and Moscow, 1993, no. 144, with illustration. “In pursuit of the Absolute, Art of the Ancient World from the George Ortiz Collection”, Cat. London 1994, no. 144 with ill.

#### 6. AN AMPHORA FROM TREBENISCHTE

Belgrade, National Museum 183/I? Provenance: Trebenischte, tomb VIII, excavated in 1930. Fragmentary amphora. Rim, neck, the two handles, parts of the body, and the foot preserved. H. about 50.0, H. of neck 11.0, Dm. of neck 12.8, Dm. of body about 34.0, H. of foot 1.6, Dm. of foot 11.1. Olive-green patina. Each handle: at the top, an extension in the form of a volute on each side; at the base, a palmette of nine pointed leaves, with unconnected volutes continuing into snakes. The grip seems to be twisted by means of pairs of diagonally constricting bands. On the foot incised pointed tongues. The concave rim shows a row of beads at the outer lip. The straight neck is slender and slightly tapering, the shoulder rounded, the body ovoid, the foot rather narrow.

N. Vulic, *ÖJh* 27 (1932) 27-28, Fig. 39, 40. Rolley 1982, 84 with n. 218, figs. 23, 84, 101, 105.

This amphora belongs to Group Nn (Stibbe 1992, 49-52, 61). It was erroneously omitted there. This was because of confusion in some references to two distinct pieces, a fragmentary bronze hydria allegedly from Donja Belica, and the present amphora from Trebenischte. One was mistaken for the other<sup>53</sup>.

An important fact about this amphora is that its handles (one is illustrated by Rolley 1982, Fig. 82 and 105) have a plastic moulding which, in contrast to the handles of the other amphorae and hydriae of the same type, clearly give the impression of being twisted. This detail may indicate a tradition going back to the Princeton handles (above no. 2).

#### Corrigenda

In my article in *BABesch* 67 (1992), 1-62 the following errors should be corrected.

On p. 47 left column last sentence should read: Because of the type of palmette, M3 may be dated within the orbit of the Paestum-Sala Consilina series (F2-F5): 555-545.

On p. 60, with no. L3 the reference to Rolley 1963 should be omitted. Instead read: L.I. Marangou, *Ancient Greek art: The N.P. Goulandris Collection*, 1985, 161 no. 258.

In fact the bronze hydria in the collection of the former Greek Queen is not the same as the hydria in the Museum of Cycladic Art (*Fig. 22*). The whereabouts of the former are unknown to me.

On p. 61, with no. N4, the reference to Rolley 1982 should be omitted and the description corrected as follows: (after art market) no measurements available. Vertical handle: at the rim two monkey protomes; on the grip, 5 pairs of diagonal plastic ridges with a concave band between each pair; at the base, a palmette of nine pointed leaves, with volutes ending in snakes. The rim is concave.

On p. 62, in the bibliography, add the following: Gauer, W. 1991, *Die Bronzegefäße von Olympia I* (Olympische Forschungen XX), Berlin, New York.

<sup>53</sup> Rolley 1982, 84, writing about the amphora from Trebenischte, makes reference in his note 218 to the publication of the hydria from Donja Belica: he refers to Vulic, *AA* 1933, col. 481, instead of Vulic, *ÖJh* 27, 1932, 27-28. The result is that Rolley 1982 has omitted the hydria from Donja Belica, which has been catalogued by me (Stibbe 1992, 61 no. N4, with an erroneous description and an incorrect reference to Rolley 1982; see above, Corrigenda) and that I have omitted the amphora from Trebenischte in my catalogue *ibid.* p. 61, Nn-numbers.

# ABBREVIATIONS

- ACS = Armstrong, P., Cavanagh W.G., Shipley G., Crossing the river: observations on routes and bridges in Laconia from the Archaic to Byzantine periods, *BSA* 87 (1992), 293-310.
- AO = Dawkins, R.M. et al., The Sanctuary of Artemis Orthia at Sparta, *JHS* Suppl. 5, London 1929.
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- Stibbe LV = C.M. Stibbe, *Lakonische Vasenmaler des sechsten Jahrhunderts v.Chr.*, Amsterdam/London 1972.
- Stibbe LBP I = C.M. Stibbe, *Laconian mixing bowls* (Laconian blackglazed pottery I), Amsterdam 1989.
- Stibbe LBP II = C.M. Stibbe, *Laconian drinking vessels and other open shapes* (Laconian blackglazed pottery II), Amsterdam, 1994.
- Stibbe, C.M. 1978, Lakonische Kantharoi, *MNIR* 40, N.S. 5 (1978), 23-42.
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- Stibbe, C.M. 1992, Archaic bronze hydriae, *BABesch* 67 (1992), 1-62.
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## Bemerkungen zur Herstellung, Restaurierung und Rekonstruktion der "Rosenbaum-Hydria"

Klaus Sommer

Die hier vorangehend von C.M. Stibbe vorgestellte lakonische Hydria (siehe Stibbe 1994, Figs.1-9) weist einige bemerkenswerte Details auf, die hier kurz beschrieben werden sollen<sup>1</sup>.

Erhalten waren: Mündung, Hals- und Schulteransatz, Vertikalhenkel, die beiden Horizontalhenkel wie auch der Fuß (Figs. 1-2).

Die gegossenen Teile, die drei Henkel, der Fuß und die Mündung, waren weitgehend mit einer starken Korrosionsschicht bedeckt; die wenigen nicht verkrusteten Stellen, vor allem an den Horizontalhenkeln, zeigten sorgfältige Ornamentierung in Kaltarbeit mit einer gesunden, relativ glatten braunen bis grünen Patina (Figs. 3-4).

Da beinahe alle wichtigen Teile der Hydria vorhanden waren, war es naheliegend, den Gefäßkörper zu rekonstruieren und damit die Einzelteile wieder zu vereinen.

Während den Restaurierungsarbeiten konnte ich einige Beobachtungen über technische Feinheiten bei der Herstellung des Gefäßes machen. Die Mündung mit ihrem starken Randprofil ist eindeutig gegossen worden. Eine Ansatzstelle zum fein ausgehämmerten Hals konnte ich nirgends entdecken, ebensowenig eine mögliche Ansatzstelle in der Hals- und Schulterpartie. Es darf also angenommen werden, daß der ganze obere Teil bis unter die Henkelansatzstelle gegossen worden ist und anschließend, nach jeweiligem Zwischenglühen, immer feiner ausgehämmert wurde. Beim Treiben dehnt sich das Blech, dabei entsteht eine starke Spannung, welche durch jeweiliges Glühen behoben wird<sup>2</sup>.

Der untere Teil der Hydria wurde möglicherweise aus einem oder mehreren Stücken Bronzeblech getrieben, und die Nähte wurden bis fast zur Unsichtbarkeit verhämmert<sup>3</sup>.

"Der junge Schmied, den wir auf einem gegossenen Relief der 2. Hälfte des 5. Jahrhunderts bei der Arbeit sehen, hat dieses schwierige Verfahren des Treibens schon beendet<sup>4</sup>. Auf dreibeinigem Stuhl sitzt er vor dem Amboß, über dessen Horn eine Hydria gestülpt worden ist. Die leicht vorgeneigte, gesammelte Haltung von Kopf und Oberkörper, die Richtung des Blickes gelten dem Tun der linken Hand: sie hat eine Punze an die Gefäßwand ange-

setzt. Die Rechte erhebt schlagbereit einen kleinen Schlegel. Wie G.M.A. Richter annahm, will der Handwerker ein Muster auf die Schulter der Hydria punzen. Oder ist er dabei, Löcher für die Nieten einer Henkelatlasche in das Gefäß zu schlagen?.....Die drei Henkel der Bronzehydrien - im 6. Jahrhundert meist auch der Mündungsrand - wurden einzeln gegossen, der Rand durch Vertreiben, die Henkel durch Nieten oder Lötung am Gefäß befestigt"<sup>5</sup>.

Die Henkel und der Fuß der "Rosenbaum-Hydria" erzählen uns Weiteres vom Herstellungsablauf. Sie konnten nicht einfach am fertig ausgehämmerten Gefäß befestigt werden - denn erst mußte man sie herstellen!

Die beiden Horizontalhenkel sind unterschiedlich gearbeitet, sie sind ziemlich "schepps" (in sich schief) und auch bei weitem nicht symmetrisch. Es ist schwer vorstellbar, daß die Gefäßwandung für die Henkel passend gebildet wurde - wohl eher umgekehrt!

Nachdem der Vasenkörper fertig getrieben war, wurden die Henkel aufmodelliert; folgende Spuren sprechen dafür:

Für seine Ermutigung, meine Bemerkungen zur "Rosenbaum-Hydria" hier zu veröffentlichen, bedanke ich mich bei Conrad M. Stibbe. Auf zwei seiner Arbeiten verweise ich im Folgenden: Stibbe, C.M. 1992, *Archaic bronze hydriai*, *BaBesch* 67, 1-62. Stibbe, C.M. 1994, *BaBesch* 69, 86-93.

Für hilfreiche Gespräche danke ich Matthias Steinhart, für Korrekturen Sabina Brodbeck-Jucker.

Photos und Zeichnungen: Klaus Sommer.

<sup>1</sup> Wladimir Rosenbaum, Antiquar und Inhaber der Galleria Serodine, für den ich seit den frühen 60er Jahren als Restaurator tätig war, vertraute mir im Herbst 1979 die Fragmente der "Rosenbaum-Hydria" an - gemeinsam beschloßen wir, was damit zu geschehen habe. Ende Januar 1980 übergab ich ihm die wiederhergestellte Hydria zusammen mit einer Arbeits-Dokumentation, die auch eine stilistische Skizze und Datierung beinhaltete. An der schweizerischen Restauratorentagung SKR in Lugano vom 20. bis 22. Juni 1980 stellte ich die Hydria/deren Wiederherstellung in einem ca. 20minütigen S8-Film, den ich *live* kommentierte, meinen Kollegen vor.

<sup>2</sup> Claude Rolley, *Die griechischen Bronzen*, München, 1984, 19.

<sup>3</sup> Erika Diehl, *Die Hydria*, Mainz, 1964, 5.

<sup>4</sup> Diehl 1964, 5, Taf. 1,3; Gerhard Zimmer, *Antike Werkstattbilder*, Berlin, 1982, Nr. 11,1, Abb. S. 53. Zum Treiben: Rolley 1984, 19.

<sup>5</sup> Diehl 1964, 5.

Die Henkel wurden "hohl" gegossen, ebenso der Fuß; sie sind aber nicht hohl, denn der für einen Hohlguß notwendige, keramische Kern wurde im Henkel belassen (Figs. 5-8). In den beiden Horizontalhenkeln ist auf jeder Seite ein Loch in diesem Kern. Ein weiteres Loch ist im Kern des Vertikalhenkels auf der Rückseite der Frauenprotome festzustellen (Fig. 8). Auf der Rückseite des rechten Horizontalgriffs, etwa in der Mitte der inneren Rundung, steckt noch ein Stück verrosteter Eisendraht (etwa mit demselben Durchmesser wie die Löcher im Kern). Am zweiten Horizontalhenkel, etwa an gleicher Stelle, befindet sich ein Loch mit Eisenrostspuren auf der Patina drumherum. Ein anderes Drahtstück (bzw. dessen Korrosionsspuren) ist auf der Rückseite des Vertikalhenkels zu finden (ca. 1 cm unterhalb der oberen Ornamentplatte).

Folgender Herstellungsprozess ist denkbar: Um gebogene Eisendrähte (die Armierung für das eher "spröde", auch nicht sehr geschmeidige Kernmaterial), wurde mit gemagertem Ton der Gußkern für die Henkel gebildet. Nachdem diese Träger getrocknet waren, wurden mit Bienenwachs in der späteren Bronzestärke die eigentlichen Henkel aufmodelliert. Nach diesen Arbeiten, die am Gefäß ausgeführt wurden, konnten die in ihrer Grundform gestalteten Henkel mit weiteren Tonüberzügen - der eigentlichen Gußform - versehen werden. Um ein Verschieben des Gußkerns zu verhindern, wurde an später kaum sichtbarer Stelle noch ein Stück Eisendraht angebracht (Löcher oder Korrosionsspuren auf den Henkelrückseiten, Figs. 5-8). Dieselbe Technik wurde auch für den Fuß angewandt. Dazu wurde die Hydria auf ihre Mündung gestellt. Eine Armierung war hier nicht notwendig, da der Fuß nicht freitragend wie die Henkel aufliegt.

Nach dem Gießen in der *cire perdue*-Technik<sup>6</sup> wurden die Rohlinge entformt, geglättet und die Details fein ziseliert<sup>7</sup>.

Um eine bessere Standfestigkeit der Hydria zu erreichen, wurde der Gußkern beim Fuß durch Blei ersetzt<sup>8</sup>, in den Henkeln, da nicht weiter störend, belassen (Figs. 5-8). Das Blei hat im Laufe der Zeit den Bronzemannmantel gesprengt (Fig. 9).

Drei kleine Gußfehler in der Fußwandung (einer seitlich, Fig. 10, zwei unten, Fig. 11) "stopfte" man, anscheinend noch vor dem Eingießen des Bleies, von der Innenseite her mit kleinen Bronze-"Zapfen", die in die Löcher gehämmert wurden. Der Fuß wurde mit Weichlot (Blei oder Zinn) am Vasenkörper befestigt. Da er, im Gegensatz zu den Henkeln, nur statischen Belastungen ausgesetzt wird, waren keine Nieten notwendig.

Für das Aufmodellieren der Henkel und des Fußes auf das schon fertig getriebene Gefäß sprechen nicht nur die in sich schiefen Henkel, sondern auch der mindestens ebenso unregelmäßig gebildete Fuß, der auch perfekt auf der unebenen Oberfläche des Hydriabodens aufgelegt haben mußte. Die zwei Horizontalhenkel wurden mit je vier Nieten am Vasenkörper befestigt. Wie sorgfältig und technisch einwandfrei diese Nietarbeit ausgeführt wurde, veranschaulichen die zwei noch kompletten Nietstellen mit Wandungsblech-Fragment und Unterlegscheiben an der linken Seite des linken Horizontalhenkels (Fig. 5). Auch der Vertikalhenkel wurde sowohl am Gefäßkörper (Fig. 8) wie auch am Mündungsrand mit je zwei Nieten befestigt (Fig. 13). Dieser Henkel und die Mündung sind noch mit den Originalnieten verbunden. Die Unterseiten der Nietköpfe auf der Mündung sind nicht plan, sondern ragen fast einen halben Centimeter darüber hinaus (Fig. 14). Kreisrunde Lotspuren mit einem Durchmesser von ca. 1,8 cm um jede Niete (Fig. 15) lassen darauf schließen, daß hier möglicherweise ein figürlicher oder ornamentaler Aufsatz befestigt war<sup>9</sup>. Nach dem Aufnieten der Henkel wurde noch zusätzlich gelötet, um die Stelle zu dichten und gleichzeitig ein "Scheppern" zu verhindern.

#### RESTAURIERUNG

Lehmige Auflagerungen über der Korrosionskruste (Fig. 1, Zustand nach Erhalt) ließen sich nach einigen Stunden in destilliertem Wasser abbürsten (Figs. 3-4). Die teilweise über millimeter-starke Korrosionskruste wurde in langwieriger Feinarbeit, bei starker Vergrößerung und dem Binokular, mechanisch entfernt (Fig. 16, Zustandaufnahme). Nach abgeschlossener Reinigung wurden die Bronzeteile gewässert; Chloridproben des Waschwassers ergaben einen negativen Befund, ebenso ein darauffolgender 48-stündiger Feuchtkammertest. Die Bronze blieb stabil - Ausblühungen

<sup>6</sup> Rolley 1984, 15ff. Abb. S. 18.

<sup>7</sup> U. Bunte, Ziertechniken auf Bronzeoberflächen, in: H. Born, *Archäologische Bronzen, Antike Kunst, Moderne Technik*, Berlin, 1985, 58ff.

<sup>8</sup> Brian B. Shefton, *Die "rhodischen" Bronzekannen*, Mainz, 1979, 3. (Bei "leichten" aus Blech getriebenen Gefäßen scheint eine Fußbeschwerung allgemein üblich zu sein).

<sup>9</sup> Sowohl bei der Grächwiler- wie auch bei der Pesaro-Hydria ragte, zwar nicht auf die Mündung genietet, sondern mit dem Vertikalhenkel verbunden, figürlicher Schmuck relativ hoch über die Mündung hinaus. Vergl. H. Jucker, *Altes und Neues zur Grächwiler-Hydria*, *Zur griechischen Kunst*, in: *Festschrift H. Bloesch* (Ant.K. 9 Beiheft), Bern 1972, Taf. 11, 15, 16. Stibbe 1992, 23, Fig. 32 G1, Fig. 33 G2.

konnten keine beobachtet werden. Nach dem Trocknen gelangten die Bronzeteile für kurze Zeit vorbeugend ("Bronzekrankheit") in eine 3%ige Benzotriazol-Alkohol-Lösung<sup>10</sup>. Nach Abschluß dieser Behandlung und einer ausgiebigen Trockenzeit unter der Infrarotlampe wurde ein Schutzfirnis (Paraloid B72) aufgetragen.

#### REKONSTRUKTION

Der Verlauf der Kontur vom Halsansatz bis annähernd zum größten Umfang des Gefäßes, welcher etwa im oberen Drittel der Horizontalgriffe erreicht wird, ist durch Wandungsfragmente der Schulter und den Vertikalhenkel-Ansatz gegeben (Fig. 17, Rekonstruktionszeichnung bis zur gestrichelten Linie).

Ein weiterer Verlauf ist gesichert durch die Ansatzrundung der Horizontalhenkel, die sich im oberen Teil mit derjenigen des Vertikalhakens deckt. Den Kontur-verlauf unter den Horizontalhaken bis zum Fuß kennen wir nicht. Um diese Silhouette annähernd zu finden, sind wir auf Vergleichsstücke angewiesen. Das Problem versuchte ich optisch wie auch rechnerisch zu lösen, durch Vergleichen mit verwandten Hydrien. Hier stieß ich auf etwelche Schwierigkeiten, da mir kein vergleichbares Gefäß bekannt war, das so früh entstanden ist, wie ich die "Rosenbaum-Hydria" datierte - ich halte sie für ein Werk aus dem letzten Viertel des 7. Jahrhunderts<sup>11</sup>. Bei der Rekonstruktion hielt ich mich deshalb gezwungenermaßen an später entstandene Hydrien, die wenigstens in ihren Proportionen eine gewisse Verwandtschaft aufwiesen. Die Rekonstruktion der Grächwiler-Hydria in Bern<sup>12</sup>, bei deren Formsuche man sich an Gefäßen in Pesaro<sup>13</sup> und Berlin<sup>14</sup> orientiert hatte, diente mir unter anderem als Vorbild. Etwas näher, formal wie auch zeitlich, ist die Hydria in Oxford<sup>15</sup> (bei der jedoch der Fuß fehlt). An sie, wie auch an eine Hydria in Paris<sup>16</sup>, die allerdings einige Jahrzehnte jünger ist, habe ich mich ebenfalls gehalten.

Für eine erste Überprüfung der erarbeiteten Kontur habe ich die Gefäß-Silhouette aus einer Preß-spanplatte ausgesägt und die Originalteile angefügt (Fig. 18). Die Form paßte. Zur dreidimensionalen Probe habe ich daraufhin ein Kartongerippe hergestellt<sup>17</sup>, auf welchem vor allem der Sitz der Horizontalhenkel kontrolliert werden konnte (Fig. 19). Die Abbildung täuscht den ganzen Gefäßkörper vor - tatsächlich habe ich, mir dienlicher, nur eine Hälfte mit dem Gerippe gebildet.

Dieses Lamellengebilde diente danach als Träger für die Herstellung des neuen Vasenkörpers<sup>18</sup>.

Die Blechteile, Hals und Schulter, wurden, nachdem sie eingepaßt waren, mit Epoxid-Harz auf dem Vasenkörper befestigt<sup>19</sup>. In alle andern Teile wurden Messingschrauben eingelassen (ausschraubbar, Figs. 21-22), welche nun die "Appliken" mit dem Vasenkörper verbinden (Horizontalhenkel und Fuß können zu eventuellen Studienzwecken entfernt werden). Ein Stück Schulterblech, das eine starke

<sup>10</sup> Márta Járó, Chemische und elektro-chemische Methoden bei der Restaurierung und Konservierung von Bronzefunden, in: *Archäologische Bronzen*, 147 (vgl. Anm. 7).

<sup>11</sup> Die dreieckige Frauenprotome mit ihrer Kordel-Perücke erinnert stark an dädalische Bildwerke aus dem Einflußbereich Kretas. Vergl. z.B. G.M.A. Richter, *Handbuch der griechischen Kunst* (London, 1959) Köln, 1966, Abb. 55 (Die Göttin von Auxerres); R.J.H. Jenkins, *Dedolica, Dorian Plastic Art, 7th C. B.C.* Chicago, 1978, Pl. 1-11. C. Rolley stimmt dieser Datierung zu (Brief an M. Sguaitamatti vom 4.2.84). Siehe auch Stibbe 1994, 86-93.

<sup>12</sup> Jucker 1972, Abb. 6, S. 53, Taf. 15-16; Stibbe 1992, Fig. 32, 35.

<sup>13</sup> Jucker 1972, Taf. 11,2; Stibbe 1992, Fig. 33.

<sup>14</sup> Jucker 1972, Taf. 13,4; Stibbe 1992, Fig. 20.

<sup>15</sup> Diehl 1964, B 10, Taf. 2,2 und 2,4; Stibbe 1992, B 1, Fig. 8.

<sup>16</sup> C. Rolley, *The Bronzes, Monumenta Graeca et Romana V* Leiden, 1967, Taf. 48, Nr. 143; C. Rolley, *Les vases de bronze de l'archaïsme récent en Grande Grèce*, Naples, 1982, Nr. 4: Pl. 1,4.; Pl 7, 28.; Diehl 1964, B 26; Stibbe 1992, F 5, Fig. 27.

<sup>17</sup> Ein Lamellengerippe dieser Art, auch ohne weitere Bearbeitung, könnte gut auch für Ausstellungszwecke verwendet werden. Mancher Vorteil gegenüber andern Ergänzungsmethoden ist ihm eigen: so ist es verwendbar für die Konstruktion/Rekonstruktion sowohl von Mini- wie auch Maxigebilden und mit einfachsten Werkzeugen, auch von wenig geschickten Handwerkern herstellbar. Die Materialkosten sind minimal, der Zeitaufwand gering, und es kann, zusammengefaltet, leicht korrigiert werden!

Im vorliegenden Fall verwendete ich 28 Karton-"Blätter" (für die halbe Gefäßform) von 1 mm Stärke, die ich an ihrer Längsseite auf einen Papierstreifen zu einem "Buch" zusammenleimte (mit elastischem Acryl-"Weißleim"). Darauf übertrug ich die rekonstruierte Kontur auf das Deckblatt - nach Abzug des Radius des sich im Zentrum ergebenden Hohlzylinders, der entsteht bei der Biegung des "Buchrückens" (Radius = Dicke des Buches geteilt durch  $\pi$ ). Auf der Bandsäge wurde die Kontur nun ausgesägt. Schließlich leimte ich das aufgeschlagene "Buch" auf die Preß Spanplatte, die zuvor als Probeform gedient hatte.

<sup>18</sup> Zur Herstellung des Vasenkörpers wurden die Rippen zuerst mit Scotch-Abdeckband überspannt, zweimal kreuzweise, diagonal zur Achse des Körpers. Diese "Scotch-Haut", durch die sich die Rippen noch abzeichneten, wurde mit Polyester-Spachtelkitt geglättet und fein geschliffen. Anschließend brachte ich eine mehrere Millimeter dicke Silikonkautschuk-Schicht auf (Silikonkautschuk RTV-M457 der Wacker-Chemie GmbH, München), und darüber wurde eine weitere Schicht, die Stützform aus Gips, aufgegossen. Damit war eine Negativform entstanden, in die nun der eigentliche Vasenkörper eingeformt werden konnte, was mit grau eingefärbtem Polyester und Glasfasergewebe im Laminier-Verfahren geschah. Nach Wiederholung des letzten Arbeitsganges brauchten die zwei so entstandenen Schalen-Hälften nur noch zusammengefügt zu werden, innen von einer weiteren Laminierschicht zusammengehalten, außen verspachtelt und überschliffen.

<sup>19</sup> Araldit LX 554, Härter HY 554, mit Aerosil etwas eingedickt.



innere Spannung aufwies, habe ich nicht eingefügt. Es ist im Inneren des Gefäßes, ebenfalls für eventuelle Studien, abnehmbar befestigt. Zum Schluß wurde der neue Vasenkörper den vorhandenen antiken Bronzeteilen farblich angeglichen. Die Original-Blechteile sind durch eine feine Rille von den Ergänzungen sichtbar abgegrenzt.

Das Gefäß<sup>20</sup>, so wie es sich heute nach abgeschlossener Restaurierung präsentiert, veranschaulicht, sowohl "im Kleinen wie auch im Großen", das meisterhafte Können früher lakonischer Toreuten (Fig. 20, Stibbe 1994, Fig. 1-9).

CH-6654 CAVIGLIANO

<sup>20</sup> Maße nach abgeschlossener Restaurierung:

Höhe über alles	43,8	cm
Höhe (Mündung)	42,8	cm
Höhe des Mündungsrandes	0,9 - 1,0	cm
Ø Mündung	28 - 28,3	cm
Ø Gefäß, größter o. Henkel	36,2	cm
Ø Gefäß, größter m. Henkel	46,7	cm
Ø Hals, an engster Stelle	16,8 - 17,1	cm
Wandstärke, Bauchansatz	0,04 - 0,06	cm
Wandstärke, Henkelzone ca.	0,07	cm
Ø Fuß, Ansatzstelle oben	11,8 - 12,1	cm
Ø Fuß, größter	14,9 - 15,1	cm
Höhe des Fußes	2,7 - 2,8	cm
<i>Vertikalhenkel</i>		
Höhe (als Sehne gemessen)	15,2	cm
Breite, oben	12	cm
Breite, unten (Halbspulen)	9,5	cm
<i>linker Henkel</i>		
Länge	13,5	cm
Höhe, links	7,17	cm
Höhe, rechts	7,1	cm
<i>rechter Henkel</i>		
Länge	13,75	cm
Höhe, links	7,1	cm
Höhe, rechts	7,5	cm



*Fig. 1. Mündung, erhaltene Schulterpartie und Vertikalhenkel in ungereinigtem Zustand.*



Fig. 2. Alle erhaltenen Teile vor der Reinigung.  
 Fig. 3. Vertikalhenkel nach Entfernung der Erdauflagerungen.  
 Fig. 4. Beide Horizontalhenkel vor der Reinigung.



2 3



4



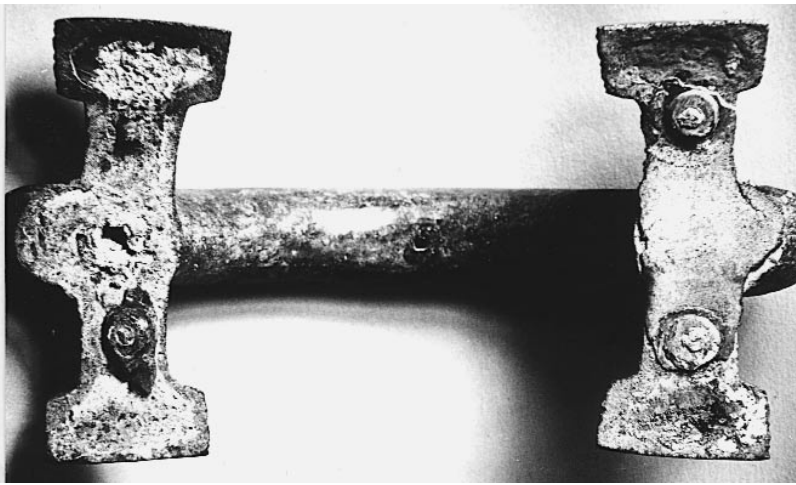


Fig. 5. Linker Henkel, der Wandung zugekehrte Seite.

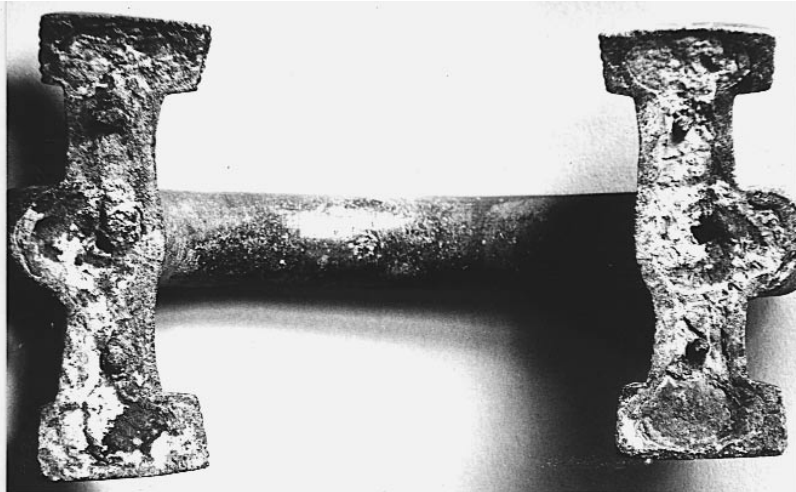


Fig. 6. Rechter Henkel, der Wandung zugekehrte Seite.

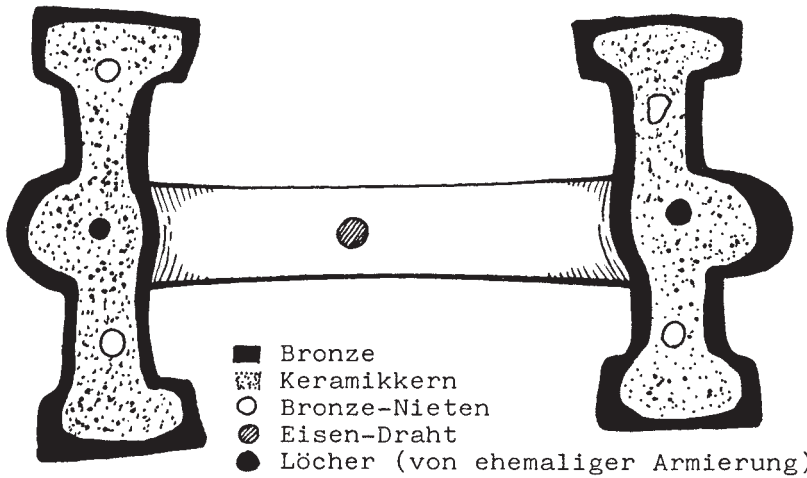


Fig. 7. Skizze des rechten Henkels.



Fig. 8. Vertikalhenkel: Rückseite der Protome.

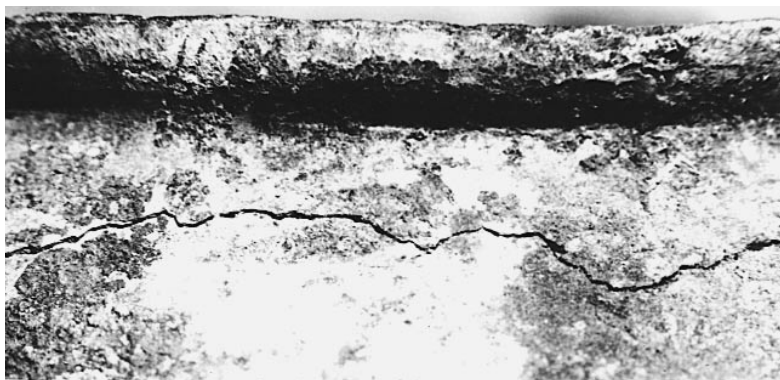


Fig. 9. Fuß: Rißbildung in der Bronze-Wandung.



Fig. 10. Fuß: Detail Außenseite, antiker Bronzeflick.



Fig. 11. Fuß: Unterseite, zwei antike Bronzeflicke.

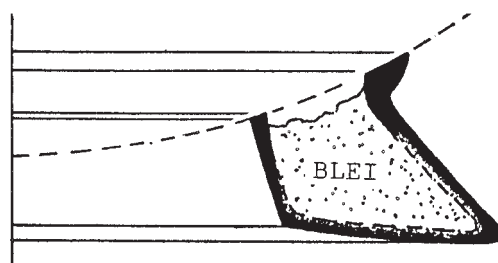


Fig. 12. Profilzeichnung des Fußes.



Fig. 13. Vertikalhenkel-Mündung: Nieten auf der Unterseite.





*Fig. 14. Mündungspartie und Vertikalhenkel nach abgeschlossener Restaurierung.*



*Fig. 15. Nieten auf der Mündung.*



*Fig. 16. Rechter Löwenkopf, mechanisch teilgereinigt.*



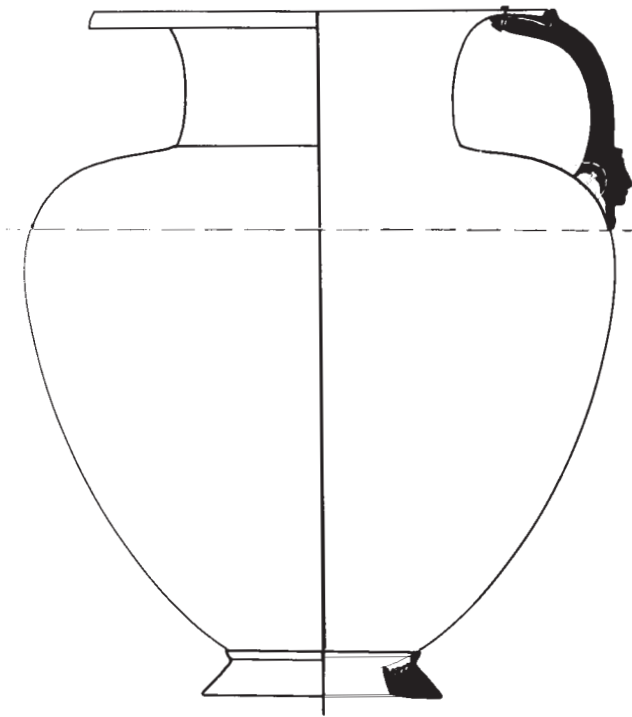


Fig. 17. Rekonstruktionszeichnung.



Fig. 18. Zweidimensionale Rekonstruktion.



Fig. 19. Dreidimensionales Lamellengerippe.



Fig. 20. Seitenansicht, links, nach abgeschlossener Restaurierung.



*Fig. 21. Fuß und Gefäßkörper vor dem Zusammenfügen.*



*Fig. 22. Linker Henkel und Gefäß vor dem Zusammenfügen.*

# Der ionische Fuß und das Verhältnis der römischen, ionischen und attischen Fußmaße zueinander

R. de Zwarte

## ZUSAMMENFASSUNG

Die Unterschiedlichkeit der Maßsysteme in klassischer Zeit tritt als Hindernis zwischen den Bauforscher und den antiken Entwurf eines Tempels. Versuche zur Erschließung einer Maßeinheit nur am Bau selbst werden zurecht immer wieder unternommen. Leider ist die Aufschlüsselung der vorgefundenen Abmessungen in eine antike Maßeinheit niemals zweifelsfrei. Endgültige Sicherheit ist nur mit zusätzlichen Informationen in Form einer schriftlichen Quelle zu bekommen. Zur Stützung unserer Überlegungen zur Gleichstellung des Didymeion-Fußes mit dem ionischen Fuß, dessen metrischen Annäherungswert wir endgültig meinen ableiten zu können, werden das Artemision von Ephesos, der Heratempel von Samos und der Zeustempel von Aizanoi herangezogen. Es stellt sich heraus, daß ein ionisches Fußmaß von ca. 34,8-34,9 cm, das in der Bauforschung fast kanonische Geltung hat, nur eine Schimäre ist<sup>1</sup>. Vitruv (III 1, 7-8) teilt einen beliebigen Fuß in 16 Daktylen und die zugehörige Elle in 24 Daktylen. Andere späte Quellen besagen dasselbe. Ein folgenschweres Mißverständnis war es, daß jeder Fuß mit 2/3 seiner Elle bewertet wurde. Herodot (II 168) hat doch die samische Elle mit der *ägyptischen* gleichgesetzt, und diese Elle hat 28 Daktylen<sup>2</sup>. Der wirkliche samische (und ionische) Fuß ist also  $16/28$  oder  $4/7$  der samisch-ägyptischen Elle:  $52,256 \times 4/7 = 29,86057..$  cm, abgerundet 29,86 cm.

In der Bauforschung wird fast allgemein angenommen, daß der ca. 29,4 cm große römische (gelegentlich: attische oder ionische oder kykladische) Fuß mit Sicherheit annähernd genau bestimmt sei. Aber es gibt schriftliche Quellen die dieses Resultat zu widersprechen scheinen, da die Rechnung eine Länge von ca. 29,6-29,7 cm ergibt. Diese Quellen sollen hier neu behandelt werden mit dem Ergebnis, daß diese angebliche Länge des römischen Fußes beseitigt wird. Wir schließen auf ein römisches Fußmaß von ca. 29,394 cm und ein attisches von ca. 32,66 cm. Danach verhalten sich römischer, ionischer und attischer Fuß wie 63 : 64 : 70.

## VORBEMERKUNG: STATUS QUAESTIONIS DER DISKUS- SION ÜBER ANTIKE FUßMAßE

Hinsichtlich der Längenmaße in klassischer Zeit haben die Bauforscher sich bis jetzt nicht einigen können. Es stehen sich da einige Meinungen gegenüber:

1. Die Fußmaße in der Antike sind fest. Dem Entwurf eines Baues soll man nur die 2 oder 3 seit langem anerkannten Fußmaße zugrundelegen (bejahend z.B. H. Büsing 1982 und 1985, 160). Der Verfasser stimmt ihm nur zu, daß Fußmaße jederzeit genormt sind.

2. Die anerkannten Fußmaße schwanken von Ort zu Ort um einige Millimeter (bejahend z.B. H. Bankel 1983 und D. Mertens 1984).

3. Es geht nicht an bei einer Entwurfsanalyse nur die anerkannten Fußmaße zu gebrauchen (bejahend z.B. J.A. de Waele 1984 und Verfasser).

Die Forschungsergebnisse de Waeles (AA 1980) sind von Mertens (AA 1981) ungewöhnlich heftig kritisiert worden. Mertens (1984, *Der Tempel von Segesta* ...) hat doch mittlerweile erfahren, daß der Entwurf eines Tempels schwer zu erschließen ist. Die Unterschiede zwischen Front- und Langseiten konnten nicht einleuchtend erklärt werden. De Waele hat dieser Arbeit von Mertens in Gnomon

Mein herzlicher Dank gilt Dr. M.D. de Weerd, der mit Hilfe, Rat und Kritik Wesentliches zu der vorliegenden Untersuchung beigetragen hat. Für Hinweise und wohlwollende Kritik danke ich Prof. Dr. C. Isings und Prof. Dr. J.S. Boersma. Mit Diskussion und Hinweisen half mir außerdem Prof. Dr. J.A.K.E. de Waele. Die Reinzeichnungen der Abbildungen 4-9 verdanke ich Mieke Snelleman (Archeologisch-Bowwhistorisch Centrum Utrecht).

<sup>1</sup> Büsing 1985, 160 Anm. 6: "Der wirkliche ionische Fuß von ca. 34,8 cm Größe ist durch Herodots Vergleich (II 168) der ägyptischen mit der samischen Elle literarisch belegt". v. Gerkan 1940, 149: 34,8672 cm. Gruben 1963, 84: 34,9 cm.

<sup>2</sup> Lepsius 1866, 18. Nach Büsing, v. Gerkan und Gruben hat die altägyptische Elle eine Länge von  $1,5 \times 34,8$  bis  $34,9 = 52,2$  bis  $52,35$  cm. Die Mehrzahl der erhaltenen Maßstäbe sind aus Stein gearbeitet, also nicht für den praktischen Gebrauch beabsichtigt (Länge 52,3 bis 53 cm). Zwei Maßstäbe aus Holz (Lepsius Nr. 1 und 2), aus der Nekropolis von Memphis stammend, haben eine Länge von bzw. 52,35 cm und 52,3 (vorn) bis 52,5 cm (hinten).



(1990) eine eingehende Rezension gewidmet. Mertens legt dem Tempel von Segesta einen Fuß von 32,861 cm – eine örtliche Variante des dorischen Fußes von 32,66 cm – zugrunde und de Waele rechnet mit einer Maßeinheit (*'embater'*) von 31,1 cm (wohl  $20/21 \times 32,66$  cm). Zum Vergleich wird in diesem Aufsatz eine Maß-Interpretation mit dem genormten ionischen Fuß von 29,86 cm vorgelegt. Diese Größe eines antiken Längenmaßes gehört jedoch nicht zu den anerkannten Fußmaßen. Der Verfasser hat sich zum Ziel gesetzt den Fuß von 29,86 cm zu begründen und seine Anwendung beim Entwurf für Tempel ionischen und dorischen Stils zu beweisen. Der anfänglich rein metrologische Charakter der Untersuchung wurde notgedrungen verlassen weil sich erwies, daß die gangbaren Meinungen zur antiken Bauplanung gründlich angepaßt werden müssen. Siehe dazu die Abschnitte über die Tempel von Aizanoi, Rhamnus, Rom und insbesondere Segesta. Wohl nicht zufällig führt die Analyse der Ansätze und Meinungen von Mertens und de Waele zu einem grundverschiedenen Einblick in den Entwurfsvorgang klassischer Tempel.

#### ZUR METHODE

“Bauforschung” ist jene architekturgeschichtliche Methode, die das Objekt ihrer Untersuchung selbst als Quelle nimmt und die Baugeschichte eines Bauwerks und den Entwurfsvorgang des Architekten aufgrund genauer Vermessung aufzuhellen und zu rekonstruieren versucht. Aber auf welche Art und Weise muß man denn methodisch vorgehen? Es gibt doch einige prinzipiell verschiedene metrologische Ansatzpunkte und nur eins kann richtig sein. *Schwankende Fußmaße.* Nach Bankel<sup>3</sup> schwanken die Fußmaße: 29,292, 29,366, 29,496 und 29,637 cm bzw. 32,515 und 32,674 cm. Die Ausführungsdifferenzen planmäßig gleichlanger Abstände bilden ein wesentliches Problem. Bankel hat versucht glaubhaft zu machen, daß Ausführungsdifferenzen fast nicht auftreten. Er erreicht das durch eine willentliche geringe Abweichung von der Normalgröße des Fußes anzunehmen. Bankel rechnet mit Durchschnittswerten. Daraus folgt, daß die Ausführungsdifferenzen (weit) größer sind als aus dem Durchschnittswert zu ersehen ist. Bankel<sup>4</sup> gibt selber zu, daß seine Methode scheitert wenn nur wenige Maße zur Durchschnittsberechnung zur Verfügung stehen. Unten wird dargetan, daß der Entwurf des Rundtempels in Rom unter Zugrundelegung des festen Fußes von 29,394 cm klar herauskommt. Auch wird nachgewiesen, daß der Entwurf mit einer Umrechnung der Maße auf

der Grundlage eines Fußes von 29,6 cm unverstänlich bleibt. Sogar eine winzige Abweichung von der Normalgröße des Fußes führt zu einem unzutreffenden Resultat. Zum Beispiel: die Aula der Domus Flavia in Rom (81-96 n. Chr.). Die gemessenen Achsabstände der Säulen sind 28.82 und 35.99 m. Das Verhältnis dieser Strecken zueinander ist deshalb 0.8007..., d.h., die Strecken sind im Verhältnis 4 : 5 entworfen worden. Hecht<sup>5</sup> hat ein Fußmaß von 29,33 cm angenommen und die Strecken zu  $98 \frac{1}{2}$  und  $122 \frac{1}{2}$  Fuß bestimmt. Die Umrechnung ergibt jedoch ungenaue Metermaße (28.89,0 und 35.92,9 m) und die Fußzahlen stehen nicht im Verhältnis 4 : 5. Mit dem normierten Fuß von 29,394 cm und die Fußzahlen 98 und  $122 \frac{1}{2}$  sind die Baumaße innerhalb von  $\pm 2$  cm realisiert (28.80,5 und 36.00,7 m) und das Verhältnis der Fußzahlen ist tatsächlich 4 : 5.

*Tempelfußmaße.* Völlig auszuschneiden hat das Verfahren für jeden Tempel ein eigenes Fußmaß vorauszusetzen. Die Schwierigkeit ist, daß wir uns den Anfang der Arbeit des Architekten etwa folgendermaßen vorstellen müssen. Der Architekt setzt sich ans Reißbrett und zieht gedankenlos Linien ungleicher Länge bis er Inspiration bekommt: Heureka, diese Linie bestimme ich zum Tempelfuß! Diese Vorstellung der Tatsachen entzieht sich dem Realitätssinn, aber es gibt kein Entkommen wenn man die These der Tempelfußmaße aufrechterhalten möchte. Die These leitet überdies an einem weiteren Mangel: Ohne ein verbindliches Maßsystem wäre keine Materialbestellung möglich.

*Feste Fußmaße.* Feste Fußmaße hat es jederzeit gegeben. Sie sind nach Ort und Zeit unterschiedlicher Länge. Ein Erklärungsversuch des Entwurfs eines klassischen Tempels mit dem englischen<sup>6</sup> Fuß von 30,48 cm ist unannehmbar, außer wenn man unanfechtbar beweisen kann, daß ein Fußmaß dieser Größe in klassischer Zeit existiert hat. Hingegen, das Entwurfsverfahren spätmittelalterlicher Architekten ist am Freiburger Münsterurm mit einem “attischen” Fuß von 32,66 cm lediglich zu erläutern, weil späte Quellen für ein Fußmaß dieser Länge bekannt sind<sup>7</sup>. Die Untersuchung von

<sup>3</sup> Bankel 1983. Bankel nennt den ersten Fuß ionisch oder attisch-solonisch und den zweiten Fuß dorisch-phaidonisch. Bankels Methode gründet auf Vorarbeiten K. Hechts (1972-1979).

<sup>4</sup> Bankel 1983, 92.

<sup>5</sup> Hecht 1979, 125-126.

<sup>6</sup> Bankel 1983, 69: Modulus von 30,48 cm. Ein Modulus steht in einer abhängigen Beziehung zu einem Längenmaß; so auch Büsing 1982, 3 Anm. 3. Aus dem Zusammenhang geht jedoch hervor, daß Bankel es bloß vermied die Bezeichnung Fuß zu gebrauchen.

<sup>7</sup> Siehe den Abschnitt Vergleichende Metrologie.

Bauwerken kann zwar ein schon bekanntes Fußmaß bestätigen, nicht aber ein sonst nicht gesichertes Fußmaß begründen. Aber es gibt viele bekannte Fußmaße, z.B. den englischen, den römischen und den ionischen Fuß. Der Forscher soll nur die in der Bauzeit des Tempels ortsübliche Maßeinheit zugrundelegen<sup>8</sup>. Das Teilungssystem des Fußes beruht in der Antike auf der Halbierung<sup>9</sup>. Folglich hat der Architekt des Tempels von Aizanoi in Phrygien (ca. 125 n. Chr.) den ionischen und nicht den römischen Fuß verwendet und ist auch der Nemesistempel von Rhamnus nach ionischem und nicht nach attischem Maß erbaut worden<sup>10</sup>.

*Gesicherte feste Fußmaße.* Gesicherte Fußmaße sind der römische<sup>11</sup> Fuß von 29,394 cm, der attische<sup>12</sup> Fuß von 32,66 cm und der ptolemäische<sup>13</sup> Fuß von  $6/5 \times 29,394 = \text{ca. } 35,27 \text{ cm}$ . Der ionische Fuß von 29,86 cm wird in diesem Aufsatz eingehend behandelt. Damit wird eine neue Maßeinheit in die Diskussion eingeführt, deren Gültigkeit keine Probleme aufwirft. Das Relief von Salamis – daß ein anderweitig nicht bekanntes Längenmaß enthält – scheidet aus, weil nicht einmal stilistische Anhaltspunkte für die Datierung vorhanden sind<sup>14</sup>. Zusammenfassend: Wir gehen aus von beim Baubeginn des Tempels mit mehr oder weniger Sicherheit ortsüblichen Fußmaßen normierter Länge. Die daktylische Einteilung des Fußes steht fest und das verschafft uns die Möglichkeit aus zwei (Rhamnus) oder drei (Aizanoi) Fußmaße die vertretbare Wahl zu treffen. Das Fußmaß ist nicht umsonst unterteilt. Niemals wird versucht runde oder glatte Zahlen zu erzwingen. Sind solche Zahlen geplant worden, erscheinen sie meistens als Summe der gebrochenen Teilmaße<sup>15</sup>.

DER APOLLONTEMPEL VON DIDYMA IN IONIEN (CA. 350 v. CHR.)

Das Ziel meiner Untersuchung war es, anhand der publizierten Vermessungen den metrischen Wert des Didymeion-Fußes wiederzufinden. Die Untersuchung ist in erster Linie metrologischer Art. Zur Nachprüfung der vorgeschlagenen Fußmaße, wird mit einem Überblick früherer Arbeiten angefangen. Pontremoli und Haussoullier haben den Tempel von Didyma in 1895-96 untersucht<sup>16</sup>. Nach der Meinung von Pontremoli und Haussoullier sollte dem Tempel ein Fußmaß von 29,5 cm (*pied milésien*) zugrunde liegen. Leider ließ die Genauigkeit der Vermessung viel zu wünschen übrig und daher ist diese Arbeit für eine eingehende metrologische Untersuchung ungeeignet.

v. Gerkan dürfte das Manuskript von Knackfuß einsehen und für eine metrologische Untersuchung

benutzen<sup>17</sup>. Die Jochweite (der Achsabstand der Säulen) von theoretisch 5,29,55 m (5,29,59 m = Summe der Durchschnittswerte der Teilstrecken) wurde mit 18 Fuß von 29,4192 cm gleichgesetzt. Die Teilmaße des Jochs, das Plinthenmaß und der Plinthenabstand, sind mehrfach gemessen, so daß sich Durchschnittsmaße berechnen lassen. Diese Teilstrecken wurden notgedrungen mit bzw.  $9 \frac{1}{6}$  und  $8 \frac{5}{6}$  Fuß bewertet<sup>18</sup>. Die herkömmliche Teilung des Fußes nach der griechischen Weise in Sechzehntel lieferte keine befriedigenden Ergebnisse. Die Teilung des Fußes in Zwölftel begegnet aber erst in römischer Zeit. Weiter hat v. Gerkan<sup>19</sup> rein rechnerisch drei angebliche Fußmaße in einfachen Verhältnissen zueinander gebracht:

attischer Fuß (29,4192 cm) : pheidonischer Fuß (32,6880 cm) : ionischer Fuß (34,8672 cm) = 27 : 30 : 32

Es genügt festzustellen, daß v. Gerkan ein ionisches Fußmaß von ca. 34,8 cm ableitet aber die Anwendung in Didyma in Ionien nicht ermitteln konnte.

<sup>8</sup> Der Heratempel von Samos (s. unten) aus der Zeit des Polykrates (ca. 530 v. Chr.) ist fast genau so gut mit dem römischen wie mit dem ionischen Fuß zu erklären.

<sup>9</sup> Vitruv III 1, 7-8 und Maßangaben auf einem Schaftstück einer hellenistischen Säule in Alexandria und auf Säulentrommeln in Didyma.

<sup>10</sup> In Aizanoi (s. unten) ist  $8 \frac{4}{7}$  PM (statt  $8 \frac{7}{16}$  IF) nicht möglich, ebensowenig wie  $5 \frac{5}{6}$  AF statt  $6 \frac{3}{8}$  IF in Rhamnus (s. unten).

<sup>11</sup> Beispielsweise: Acht Maßstäbe aus Pompeii und Herculaneum (29,2-29,7 cm) und fünf aus London (29,2-29,4 cm). Die Maßeinheit schwankt nicht, doch die Maßstäbe sind manchmal – genauso wie heute – weniger gut hergestellt worden. Bankel 1983, 81: "Dörpfeld ... berichtet, daß die in Athen bei einem Mechanikos angebotenen Metermaße bis zu 3 mm voneinander differieren konnten". Siehe unten den Abschnitt über den Rundtempel in Rom.

<sup>12</sup> Erechtheion-Fuß = attischer Fuß, s. Dörpfeld 1890, 168-171. Normierte Länge des römischen Fußes  $29,394 \text{ cm} \times 10/9 = 32,66 \text{ cm} \times 3/2 = \text{attische Elle von } 48,99 \text{ cm}$ . Aus dieser Elle sind die schon längst bekannten attischen Hohlmaße und Gewichte *genau* zu berechnen, vgl. Hultsch 1882, 510 und s. weiter unten in diesem Aufsatz.

<sup>13</sup> An einer schriftlichen Quelle (Didymos, ca. 50 v. Chr.) ist die Gleichung ptolemäischer Fuß =  $6/5$  römischer Fuß zu entnehmen, s. Hultsch 1882, 609. Haselberger (1983, 115-116) gibt eine Abbildung und die Abmessungen des schon genannten (Anm. 9) Schaftstückes von Alexandria.

<sup>14</sup> Dekoulakou-Sideris 1990, 451; Rottländer (1991-92, 93) nennt die Maßeinheit auf dem Relief einfach "antik".

<sup>15</sup> Hecht 1979, 125. Die Aula der Domus Flavia. Der Achsabstand der Säulen (s. oben) von 28,82 m ( $98' = 28,80,5 \text{ m}$ ) setzt sich zusammen aus  $9,38 + 10,11 + 9,33 \text{ m}$ , d.h.,  $31 \frac{13}{16}' + 34 \frac{3}{8}' + 31 \frac{13}{16}'$ . Idealmaße  $9,35,1 + 10,10,4 + 9,35,1 \text{ m}$ .

<sup>16</sup> Pontremoli-Haussoullier 1904, 60.

<sup>17</sup> v. Gerkan 1940. Knackfuß s.u. Anm. 20.

<sup>18</sup> v. Gerkan 1940, 132.

<sup>19</sup> v. Gerkan 1940, 149.

Knackfuß hat den Tempel mit äußerster Sorgfalt vermessen. Nach seiner Meinung sollte dem Entwurf zwei Maße zugrunde liegen. Die Länge und Breite des Cellasockels erfasste er mit 300 zu 100 Fuß, was ein Fußmaß von 29,138 bis 29,165 cm für die Horizontal-Maße ergibt<sup>20</sup>. Anders verfuhr er mit dem Aufbau<sup>21</sup>. Er verglich die Höhe der Ringhallensäule mit der ganzen Wandhöhe. An einer Stelle waren noch 16 Schichten der gleichhohen Wandquader erhalten. Sieben Schichten sind gemessen (Min. 0.59,4 m, Max. 0.59,9 m, im Durchschnitt 0.59,59 m). Knackfuß rechnete mit 0.59,68 m. Er konnte jetzt einen Vergleich anstellen und die metrischen Werte in Fuß interpretieren:

Plinthe (gemessen)	0.44,4 m = $1\frac{1}{2}$	Fuß
Basis (gemessen)	0.45,0 m = $1\frac{1}{2}$	Fuß
Orthostat (gemessen)	0.89,4 m = 3	Fuß
29 Wandschichten (berechnet)	17.30,7 m = 58	Fuß
Wandgesims (gemessen)	0.60,8 m = 2	Fuß
Gesamtsumme	19.70,3 m = 66	Fuß

Die Gesamtsumme stimmt nahezu überein mit der gemessenen Höhe der Ringhallensäule von 19.70 m. Die Rechnung ergibt für die Vertikal-Maße einen Fuß von  $19.70 : 66 = 0.29,84848..$  m. Knackfuß hat den Betrag nach unten abgerundet zu 0.29,845 m. Büsing hat mit Recht betont, und an einem Beispiel erläutert, daß die Mischung verschiedener Längenmaßnormen sich leichter denken als anwenden läßt<sup>22</sup>.

G. Gruben hat in seiner Untersuchung "*Das archaische Didymaion*" mit einem Fuß von 34,9 cm gerechnet<sup>23</sup>. Es sei erwähnt, daß Grubens Angaben in Fuß entweder einfach durch multiplizieren mit  $7/6$  in ionischen Fuß (IF) umzurechnen sind, oder außerdem bei daktylischer Fußmaßeilung angeschlossen werden müssen, z.B.,  $16' \times 7/6 = 18\frac{2}{3}'$  und ergibt  $18\frac{11}{16}$  IF.

In jüngster Zeit hat Haselberger mit seiner Entdeckung und Auswertung der Ritzzeichnungen an den inneren Wandflächen des Tempels, die als Werkpläne vom Baumeister zu deuten sind, einen wichtigen Beitrag zur Bauforschung geleistet<sup>24</sup>. Mit der Metrologie jedoch begegnete er Schwierigkeiten. Haselberger hat aus einer Ritzzeichnung ein Fußmaß von  $29,64 \pm 0,04$  cm erschlossen, aber er erwähnt, daß dieser neue Fußwert vorerst aus dem Bau selbst nicht schlüssig zu beweisen ist<sup>25</sup>. Schon seit dem Ende des vorigen Jahrhunderts war es bekannt, daß die Trommeln der jetzt noch aufrechtstehenden unfertigen Säule Inschriften tragen, die nur als Durchmesserangaben zu deuten sind. Erst Haselberger hat die beiden untersten Trommeln, beide mit der Angabe Z (= 7), auch tatsächlich gemessen<sup>26</sup>:

Fußtrommel Nr. 18, in 25 cm Höhe 2.11,4 m : 7 gibt einen Fuß von 0.30,20 m;  
dito, in 5 cm Höhe 2.11,1 m : 7 gibt einen Fuß von 0.30,16 m.

Trommel Nr. 17, in 35 cm Höhe 2.10,0 m : 7 gibt einen Fuß von 0.30,00 m.

Da die Durchmesserangaben sich nur auf den Rohdurchmesser beziehen können, ist der Mindestdurchmesser maßgebend für den Maximalwert des Didymeion-Fußes<sup>27</sup>. Die Maßangabe auf Trommel Nr. 12 lautet  $6\frac{1}{2} + \frac{1}{8} + \frac{1}{16}$  Fuß<sup>28</sup>. Folglich ist der Didymeion-Fuß in 16 Daktylen oder Finger unterteilt. Entwurfsmaße wie  $9\frac{1}{6}$  oder  $18\frac{2}{3}$  Fuß sind deshalb ausgeschlossen.

Trotz einer Fülle von genauen Meßwerten haben die Bauforscher sich nicht einigen können über das am Tempel von Didyma angewandte Fußmaß. Die Messung zweier Trommeln erläutert doch schon, daß Fußmaße von ca. 29,1-29,4 cm und ca. 34,9 cm unhaltbar sind. Dörpfeld<sup>29</sup> hat mit gutem Erfolg die detaillierten Berichte der Erechtheion-Baukommission aus dem Jahre 408/7 ausgewertet und den metrischen Wert des Erechtheion-Fußes wiedergefunden. Die Bauurkunden des Didymeion<sup>30</sup>, die auch Maßangaben in Fuß enthalten, z.B. "An der Türwand des Treppenhauses: außen: 4 der 2,5 F dicken Quader", sind m.W. nicht ausgewertet worden. Muß man denn Weißbach<sup>31</sup> beistimmen und die Untersuchung abschließen?: "Die früher von Metrologen vielfach angewendete Methode, aus den Maßen alter Bauwerke allein die vom Baumeister zugrunde gelegte Längeneinheit zu berechnen, sollte jetzt endgültig verlassen werden. Dörpfeld, der ihr früher selbst gehuldigt und sie verfeinert hatte, hat sich später das Verdienst erworben, sie als irreführend zu erweisen". Eine ähnliche Aussage hat v. Gerkan<sup>32</sup> gemacht. Es läßt sich jedoch erweisen, daß man gelegentlich imstande ist die Maßeinheit lediglich aus Baumaßen zu gewinnen. Die detaillierte Ritzzeichnung eines Säulenschafts (Fig. 1) ist von äußerster Wichtigkeit für die metrologische Forschung<sup>33</sup>. Torus und Rundstäbe sind

<sup>20</sup> Knackfuß 1941, 60.

<sup>21</sup> Knackfuß 1941, 62.

<sup>22</sup> Büsing 1986, 205.

<sup>23</sup> Gruben 1963, 84.

<sup>24</sup> Haselberger 1980, 1983 und 1985.

<sup>25</sup> Haselberger 1980, 212.

<sup>26</sup> Haselberger 1983, 116.

<sup>27</sup> So auch Haselberger 1983, 117.

<sup>28</sup> Haselberger 1983, 118. Nach Coulton (1975, 77) stammt dieses System aus Ägypten.

<sup>29</sup> Dörpfeld 1890.

<sup>30</sup> Voigtländer 1975, 144-159.

<sup>31</sup> Weißbach 1915, 156.

<sup>32</sup> v. Gerkan 1940, 144.

<sup>33</sup> Haselberger 1980, 193-200 und Abb. 1.





Tabelle 1. Analyse der Ritzzeichnung des Säulenschafts.				
	gemessen cm	Daktylen	Daktylus cm	Fußlänge cm
Rundstabhöhe des Schafthalses	4,7	2	2,350	37,600
Säulenschafthöhe im Maßstab 1 : 16	113,87	61	1,866	29,867
Rundstabhöhe des Schaftfußes	5,2	3	1,733	27,733
Torushöhe	26,08	14	1,862	29,805
Gesamtsumme	149,85	80	1,873	29,970

im Naturmaßstab gezeichnet, der Schaft jedoch im Maßstab 1 : 16. Der Schaft ist durch Linien in Abständen von je einer Daktylus unterteilt<sup>34</sup>. Der obere Teil des Maßrasters ist ziemlich ungenau gezeichnet und enthält einige Parallelritzungen im Millimeterbereich. Das angewandte Zeichenverfahren gibt Aufschluß wie man diese Zeichnung auswerten kann. Haselberger schrieb darüber folgendes<sup>35</sup>: "man rieb die betreffende Stelle mit Röteln ein und riß darauf die – weiß erscheinenden – Linien ein; Fehler ließen sich durch wiederholtes Röteln und Anreiben auf einfachste Weise beseitigen". Jetzt sind nur Spuren von Röteln vorhanden. Man sollte also die fehlerhaften Linien beseitigen und die im Naturmaßstab gezeichneten Teile in Daktylen bewerten und findet dann die Lage mit der der Zeichner schließlich zufrieden war. Aber Haselberger hat sich verlocken lassen das Raster auszubessern durch eine hypothetische Linie zwischen d61a und d62a zu postulieren. Demzufolge hat er die Gesamthöhe mit  $14 + 3 + 60 + 4 = 81$  statt  $14 + 3 + 61 + 2 = 80$  Daktylen bewertet<sup>36</sup>. Die neue Interpretation der Zeichnung stützt das Resultat, das aus den Trommeln mit Maßangaben erzielt wurde. Wichtiger ist es, daß die zweite Ritzzeichnung eines Säulenschafts, diesmal in wahrer Größe gezeichnet, danach leicht zu erklären ist. Statt 61 Daktylen soll die Länge jetzt 61 Fuß sein. Die gemessene Länge ist  $18,20 \text{ m} \pm 1,5 \text{ cm}$ <sup>37</sup>. Dieser Zeichnung gemäß ist die Größe des Fußmaßes  $1818,5 : 61 = 29,81$  bis  $1821,5 : 61 = 29,86 \text{ cm}$ . Es ist deutlich, daß die Werkzeichnungen das gleiche Fußmaß aufweisen wie Knackfuß aus dem Aufbau des Tempels erschlossen hat<sup>38</sup>. Aus dem Vorhergehenden geht hervor, daß eine sorgfältige Vermessung eines Gebäudes und ein folgerichtiger Schluß ausreichen um das Fußmaß zu bestimmen. Aber das ist erst ein Anfang. Man muß anschließend beweisen, daß der vorgefundene Fuß wirklich dem Entwurf zugrunde liegt. Knackfuß hat sporadisch tatsächlich versucht sein Fußmaß von 29,845 cm auch für horizontale Strecken anzuwenden<sup>39</sup>: "bemerkenswert ist, daß auch dieser Fuß nicht genau in der Breite der Anten oder der Stärke der Antenwand aufgeht:  $6 \frac{1}{3} \times$

$0,29845 = 1,890 \text{ m}$  gegenüber  $1,87 \text{ m}$  und  $6 \times 0,29845 = 1,79070 \text{ m}$  gegenüber  $1,822 \text{ m}$ ". Was hat ihn davon zurückgehalten diese Strecken mit bzw.  $6 \frac{1}{4}$  Fuß ( $1,86,5 \text{ m}$ ) und  $6 \frac{1}{8}$  Fuß ( $1,82,8 \text{ m}$ ) zu bewerten? Die Ausführungsdifferenzen in der Größenordnung eines halben Zentimeters sind zu vernachlässigen. Der untere Säulendurchmesser (uD) einer fertigen Säule (gemessen oberhalb des Ablaufs:  $2,02,2 \text{ m}$ ) hat Knackfuß<sup>40</sup> korrekt bewertet:  $6 \frac{3}{4} \times 0,29,845 = 2,01,5 \text{ m}$ . Offensichtlich hat Knackfuß sich nicht von seinem Fußmaß des Grundrisses trennen mögen. So erklärt sich, daß er die Jochweite (nach ihm  $5,29,6 \text{ m}$ ) nicht im Fußmaß des Aufbaus festlegt ( $17 \frac{3}{4} \times 0,29845 = 5,29,7 \text{ m}$ ) und demzufolge entging ihm, daß das Intercolumnium (Jochweite minus uD) 11 Fuß, und genau  $\frac{1}{6}$  der Säulenhöhe von 66 Fuß ist<sup>41</sup>.

<sup>34</sup> Abstand im Durchschnitt 1,85 cm mit einer Toleranz von ca. 1 mm.

<sup>35</sup> Haselberger 1983, 92.

<sup>36</sup> Linie d61a beseitigen. Linie d62a ist die abschließende Linie der Daktylus 61.

<sup>37</sup> Haselberger 1980, 203. Ich schließe mich bei der Meinung Haselbergers an, d.h., diese Zeichnung gibt die Länge des Säulenschafts ohne Torus und Rundstäbe an. Nach dem Fund einer dritten Zeichnung hat Haselberger (1983, 93) seine Meinung abgeändert, indem er dann den Torus mit einschließt. Die Rundstäbe wurden von da an außer Betracht gelassen. Die angezeigte Schafthöhe von 61 Fuß ist jedoch nicht ausgeführt. Aus der genau gemessenen Höhe des aufrechten Säulenpaares (s. Haselberger 1983, Tafel 23) von  $19,70 \text{ m}$  ( $66 \text{ Fuß} = 19,70,8 \text{ m}$ ) läßt sich eine Schafthöhe von  $18,00,3 \text{ m} \pm 5 \text{ cm}$  errechnen. Siehe Haselberger 1980, 200 und 203. Vielleicht ist die ausgeführte Schafthöhe  $60 \frac{1}{2}$  Fuß ( $18,06,5 \text{ m}$ ).

<sup>38</sup> Das Verhältnis des Didymeion-Fußes zu anderen Fußmaßen erläutert (unten), daß ein metrischer Wert von  $29,86 \text{ cm}$  statt  $29,848..$  oder  $29,845 \text{ cm}$  näher heran den theoretischen Wert kommt.

<sup>39</sup> Knackfuß 1941, 62.

<sup>40</sup> Knackfuß 1941, 89.

<sup>41</sup> Seit der Renaissance ist es in der Bauforschung üblich den Säulendurchmesser oberhalb bzw. unterhalb des Ablaufs zu messen (uD bzw. oD). Wesenberg (1983, 26) hat aus den Büchern Vitruvs erschlossen, daß in der Antike der Säulendurchmesser auf dem Ablauf gemessen wurde (UD bzw. OD). Das obige Resultat spricht jedoch für die Beibehaltung des uD-Werts (zudem *Tabelle 2*:  $oD = \frac{5}{6} uD$ ). Aus den Ritzzeichnungen geht hervor (Haselberger 1983, 95), daß der Ablauf für die Dicke einer Säule unmaßgeblich war.

Wie bekannt ist das Jochmaß maßgebend für eine Untersuchung über den Entwurf eines Tempels. Weil Knackfuß in einem ausschlaggebenden Punkt die Tatsachen falsch eingeschätzt hat, ist die Jochweite entschieden zu niedrig angenommen worden<sup>42</sup>: "Die gemessene Stylobatbreite der Frontseite beträgt 51,13 m; dieselbe setzt sich zusammen aus der Breite des Südstylobats, der äußeren Breite des Cellabaues und der Breite des Nordstylobats: 10,960 + 29,165 + 11,005 = 51,130 m. ... Der Unterschied der Breite der beiden Stylobate von 11,005 – 10,960 = 0,045 m wird als nicht beabsichtigt und vielleicht auf Verschiebungen zurückgehend zu vernachlässigen sein, so daß man als planmäßige Breite des Frontstylobats annehmen darf: 29,165 + 2 x 10,960 = 51,085 m". Leider nein. Es hat sich erwiesen, daß gerade die Stylobatbreite der Frontseite sehr genau ist (171 1/4 Fuß = 51.13,5 m) und daß die drei Teilmaße bzw. – 1,3 cm, – 2,3 cm und + 3,2 cm vom Idealmaß differieren. Nun hat Knackfuß die Jochweite zu 5.29,6 m angesetzt und die Front hat neun Joche. Das wirkliche Jochmaß ist also ca. 5.29,6 + (0.04,5 m : 9) = 5.30,1 m. Zusammenfassend (mit 1 Fuß = 29,86 cm):

Plinthenbreite im Durchschnitt 2.69,06 m, Idealmaß 2.68,7 m = 9 Fuß;  
 Plinthenabstand im Durchschnitt 2.60,53 m, Idealmaß 2.61,3 m = 8 3/4 Fuß;  
 Jochweite im Durchschnitt 5.29,59 m, Idealmaß 5.30,0 m = 17 3/4 Fuß.

Ein regelmäßiger ionischer Tempel wie der Apollontempel von Didyma hat überall gleiche Joche und dazu eine streng axiale Bindung von Säulen und Wänden (Fig. 2). Es ist deshalb ziemlich einfach eine Strecke in seine regelmäßigen Teilstrecken zu zerlegen. In langen Strecken sind runde oder wenig gebrochene Fußmaßbeträge zu erwarten, z.B. die Breite des Tempels wird in Fuß<sup>43</sup>:

*Krepisbreite* (201 1/4') = Stufenausladung (15') + Stylobatbreite (171 1/4') + Stufenausladung (15'); 6 Stufen = 6 x 2 1/2'.

*Stylobatbreite* (171 1/4') = Südstylobat (36 3/4') + Cellasockelbreite (97 3/4') + Nordstylobat (36 3/4'); 36 3/4' = 1 1/4' (Abstand Stylobatkante bis Plinthenkante) + 2 x 9' (Plinthenbreite) + 2 x 8 3/4' (Plinthenabstand).

*Cellasockelbreite* (97 3/4') = 6 x 9' (Plinthenbreite) + 5 x 8 3/4' (Plinthenabstand) oder Adytonwandstärke (12 1/2') + Adytonbreite (72 3/4') + Adytonwandstärke (12 1/2').

*Adytonbreite* (72 3/4') = Wandsockel-Naiskos (22') + Naiskosbreite (28 3/4') + Naiskos-Wandsockel (22').

*Naiskosbreite* (28 3/4') = Rücksprung (3/8') + 7 x 4' (Plattenpflaster) + Rücksprung (3/8').

Kommen wir aber nun zur endgültigen Begründung des Didymeion-Fußes von 29,86 cm. Falls nichts näheres ist angegeben, sind die Meßwerte dem von Knackfuß<sup>44</sup> gezeichneten Übersichtsgrundriß des Tempels entnommen worden.

Tabelle 2. Vergleichstabelle mit ausgeführten und theoretischen Maßen.

	gemessen (m)	Idealmaß	Fuß
Stylobatbreite <sup>45</sup>	51.13,0	51.13,5	171 1/4
Stylobatkante-Cellasockel	10.96,0 und 11.00,5	10.97,3	36 3/4
Cellasockelbreite <sup>46</sup>	29.16,5 und 29.20,0	29.18,8	97 3/4
Plinthenbreite	2.68,2 bis 2.69,5	2.68,7	9
Plinthenabstand	2.59,5 bis 2.61,5	2.61,3	8 3/4
Jochweite <sup>47</sup>		5.30,0	17 3/4
Stylobatkante-Plinthenkante	0.36,3	0.37,3	1 1/4
Stylobatlänge <sup>48</sup>	109.34,0 (berechnet)	109.43,6	366 1/2
Cellasockellänge <sup>49</sup>	87.41,5 und 87.44,0	87.48,9	293
Krepisbreite <sup>50</sup>	60.13,0	60.09,3	201 1/4
Krepislänge <sup>51</sup>	118.34,0	118.39,4	396 1/2
Stufenausladung (6 Stufen)	4.50	4.47,9	15

<sup>42</sup> Knackfuß 1941, 82.

<sup>43</sup> Metermaße in *Tabelle 2*.

<sup>44</sup> Knackfuß 1941, Zeichnung Nr. 146.

<sup>45</sup> 10 Säulen: 10 x 9 + 9 x 8 3/4 + 2 x 1 1/4 = 36 3/4 + 97 3/4 + 36 3/4 Fuß.

<sup>46</sup> Knackfuß 1941, 60. 6 Säulen: 6 x 9 + 5 x 8 3/4 Fuß.

<sup>47</sup> Knackfuß 1941, 82: 5.29,6 m; Haselberger 1983, 100 Anm. 28: 5.30,1 m ± 0,3 cm.

<sup>48</sup> Knackfuß 1941, 82: 10.96,0 + 87.41,5 + 10.96,0 m. Die Stylobatlänge war wegen der Zerstörung der Westseite nicht unmittelbar meßbar. 21 Säulen: 21 x 9 + 20 x 8 3/4 + 2 x 1 1/4 = 36 3/4 + 293 + 36 3/4 Fuß.

<sup>49</sup> 17 Säulen: 17 x 9 + 16 x 8 3/4 Fuß.

<sup>50</sup> 2 x 15 + 171 1/4 Fuß.

<sup>51</sup> 2 x 15 + 366 1/2 Fuß.



	gemessen (m)	Idealmaß	Fuß
Fronttreppe (12 Stufen)	4.50	4.47,9	15
Stufe	0.37,6	0.37,3	1 $\frac{1}{4}$
Dodekastyllostiefe <sup>52</sup>	15.88,9 bis 15.90,0	15.90,0	53 $\frac{1}{4}$
Dodekastyllosbreite <sup>53</sup>	23.78,5	23.81,3	79 $\frac{3}{4}$
Zweisäulensaalteiefe <sup>54</sup>	8.73,7	8.73,4	29 $\frac{1}{4}$
Zweisäulensaalbreite <sup>55</sup>	14.04,0	14.03,4	47
Wand-Säule	3.14,1 bis 3.15,3	3.13,5	10 $\frac{1}{2}$
Säule	2.43,6 bis 2.45,5	2.46,3	8 $\frac{1}{4}$
Intercolumnium	2.82,5	2.83,7	9 $\frac{1}{2}$
Treppenhausbreite <sup>56</sup>	5.30,3	5.30,0	17 $\frac{3}{4}$
Treppenbreite	1.18,9 bis 1.20,8	1.19,4	4
Zwischenwand	1.15,1	1.15,7	3 $\frac{7}{8}$
Zweisäulensaalwand	1.74,3	1.75,4	5 $\frac{7}{8}$
Adytonlänge <sup>57</sup>	54.56,3 und 54.61,9	54.60,6	182 $\frac{7}{8}$
Pilasterbreite <sup>58</sup>	1.78,0 bis 1.80,3	1.79,2	6
Pilasterabstand <sup>59</sup>	3.48,9 bis 3.50,5	3.49,0	11 $\frac{11}{16}$
Adytonbreite <sup>60</sup>	22.89,6 bis 22.91,4	22.91,7	76 $\frac{3}{4}$
Adytonbreite	22.31,4	22.32,0	74 $\frac{3}{4}$
Adytonbreite <sup>61</sup>	21.71,4	21.72,3	72 $\frac{3}{4}$
Adytonwandstärke	3.73	3.73,3	12 $\frac{1}{2}$
Wandsockel-Naiskos	6.56	6.56,9	22
Naiskosbreite	8.59,0	8.58,5	28 $\frac{3}{4}$
Naiskoslänge	14.53,6	14.55,7	48 $\frac{3}{4}$
Wandsockel-Naiskos	4.71	4.70,3	15 $\frac{3}{4}$
Naiskos, Plattenpflaster <sup>62</sup>	1.19,3	1.19,4	4
Naiskos, Rücksprung <sup>63</sup>	0.11 bis 0.12	0.11,2	$\frac{3}{8}$
Naiskos, Jochweite <sup>64</sup>	2.38,6	2.38,9	8
Adyontreppe (22 Stufen)	8.22,1	8.21,1	27 $\frac{1}{2}$
Stufe	0.37,4	0.37,3	1 $\frac{1}{4}$
Treppenbreite	15.24,0	15.22,9	51
unterer Säulendurchm. <sup>65</sup> (uD)	2.02,2	2.01,6	6 $\frac{3}{4}$
Intercolumnium <sup>66</sup> (IC)	3.28	3.28,5	11
Säulenhöhe <sup>67</sup> (SH)	19.70	19.70,8	66
Schafthöhe mit Torus <sup>68</sup>	18.18,9 (Ritzzeichnung)	18.19,6	60 $\frac{15}{16}$
Torushöhe <sup>69</sup>	0.27,5 (Ritzzeichnung)	0.28,0	$\frac{15}{16}$
Schafthöhe ohne Torus	17.91,4 (Ritzzeichnung)	17.91,6	60
1/2 uD <sup>70</sup>	1.00,97 und 1.00,8 (Rz.)	1.00,8	3 $\frac{3}{8}$
1/2 oD <sup>71</sup>	0.83,9 und 0.84,3 (Rz.)	0.84,0	2 $\frac{13}{16}$
Naiskosbreite <sup>72</sup>	10.71,2 (Ritzzeichnung)	10.71,2	35 $\frac{7}{8}$
Naiskos, Jochweite <sup>73</sup>	3.31,3 (Ritzzeichnung)	3.31,3 (?)	11 $\frac{3}{32}$

<sup>52</sup> Knackfuß 1941, 81. 3 Säulen: 3 x 17  $\frac{3}{4}$  Fuß.

<sup>53</sup> 4 Säulen: 4 x 9 + 5 x 8  $\frac{3}{4}$  Fuß.

<sup>54</sup> 10  $\frac{1}{2}$  + 8  $\frac{1}{4}$  + 10  $\frac{1}{2}$  Fuß.

<sup>55</sup> 10  $\frac{1}{2}$  + 8  $\frac{1}{4}$  + 9  $\frac{1}{2}$  + 8  $\frac{1}{4}$  + 10  $\frac{1}{2}$  Fuß.

<sup>56</sup> 2 x 4 + 3  $\frac{7}{8}$  + 5  $\frac{7}{8}$  Fuß.

<sup>57</sup> 54.61,9 m = Summe der Teilmaße. 11 Pilaster: 11 x 6 + 10 x 11  $\frac{11}{16}$  Fuß.

<sup>58</sup> S1 (s. Knackfuß 1941, Zeichnung 146) = 1.83,6 m. 6  $\frac{1}{8}$  Fuß = 1.82,9 m.

<sup>59</sup> S1-S2 (s. Zeichnung 146) = 3.37,0 m. 11  $\frac{1}{4}$  Fuß = 3.35,9 m.

<sup>60</sup> 5 Pilaster: 5 x 6 + 4 x 11  $\frac{11}{16}$  Fuß.

<sup>61</sup> 2 x 22 + 28  $\frac{3}{4}$  Fuß; 72  $\frac{3}{4}$  + 2 x 12  $\frac{1}{2}$  (Adytonwand) = 97  $\frac{3}{4}$  Fuß = Cellasockelbreite.

<sup>62</sup> Haselberger 1983, 106-107.

<sup>63</sup> Haselberger 1983, 107.

<sup>64</sup> Haselberger 1983, 100.

<sup>65</sup> Knackfuß 1941, 87: Säule Nr. 11. Haselberger 1983, 116: 2.01,5-2.02,0 m.

<sup>66</sup> Haselberger 1983, 95.

<sup>67</sup> Knackfuß 1941, 87. SH : IC = 6, SH : uD = 9  $\frac{7}{9}$ . Die Proportion SH = 9  $\frac{7}{9}$  uD ist für den Entwurf eines Tempels bedeutungslos. Nur ganzzahlige Proportionen kommen in Betracht. Keine Lösung bietet SH = 9 UD da der UD in diesem Fall auf 7  $\frac{1}{3}$  Fuß auskommen würde. Siehe die Bemerkungen Wesenbergs (1983, 23 ff.) zum sogenannten ionischen Kanon.

<sup>68</sup> Haselberger 1983, 93. In dieser Zeichnung einschließlich Rundstäbe?

<sup>69</sup> Haselberger 1983, 93. Haselberger 1980, 196: ausgeführt 25-28 cm.

<sup>70</sup> Haselberger 1983, 94. Haselberger 1980, Abb. 1.

<sup>71</sup> oD = 5/6 uD.

<sup>72</sup> Haselberger 1983, 100.

<sup>73</sup> Haselberger 1983, 100: "seine 3.31,3 m  $\pm$  0,2 cm weit angerissenen Joch, die zu denen des großen Tempels exakt das Verhältnis von 8 : 5 aufweisen": 11  $\frac{3}{32}$  x 8/5 = 17  $\frac{3}{4}$ . Das stimmt. Doch ein Joch von 11  $\frac{1}{8}$  Fuß (3.32,2 m) gibt 3 x 11  $\frac{1}{8}$  + 2 x 1  $\frac{1}{4}$  = 35  $\frac{7}{8}$  Fuß = die angerissene Naiskosbreite. Die Alternative 3 x 11  $\frac{3}{32}$  + 2 x 1  $\frac{19}{64}$  ist wenig wahrscheinlich.

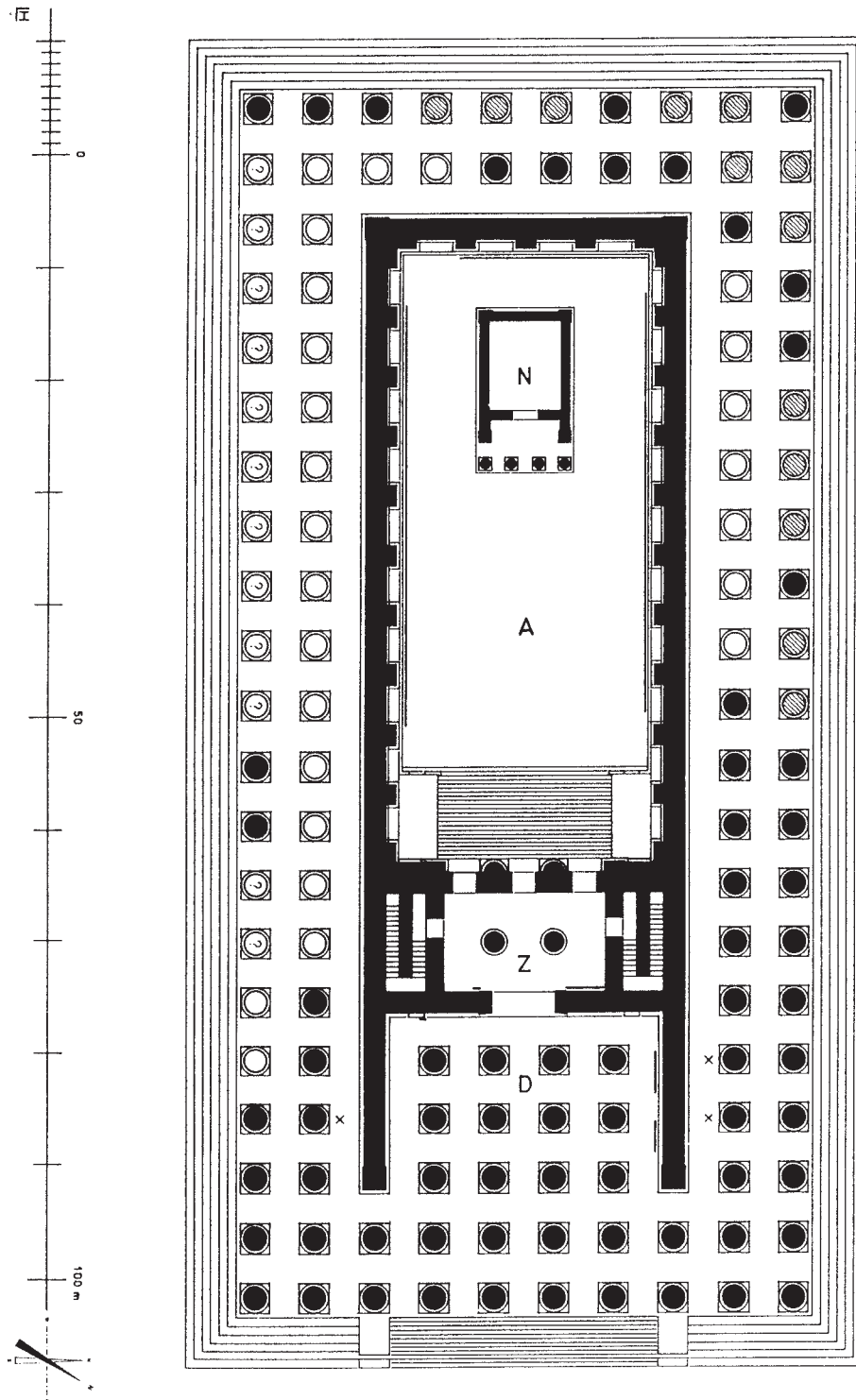


Fig. 2. Grundriß des Apollontempels von Didyma (nach Haselberger). Die Teile der Cella sind den Dodekastylos (D), den Zweisäulensaal (Z), das Adyton (A) und den Naiskos (N). Die drei noch aufrechtstehenden Säulen sind mit x bezeichnet.

Sämtliche bisherigen Fragen klären sich, wenn die Maße von Metern in Fuß von 29,86 cm umgerechnet werden. Damit sind wir beim wichtigsten Punkt. Nunmehr ist nachzugehen, ob man dieses Fußmaß zumindest regionale Bedeutung zumessen könnte. Es läßt sich in der Tat erweisen, daß der Didymeion-Fuß mit dem ionischen Fuß (IF) identisch ist. Dazu müssen wir die sachdienlichen Hinweise ausnutzen. So wissen wir z.B., daß Paionios in Ionien Karriere gemacht hat.

#### DAS ARTEMISION VON EPHEOS (CA. 355 V. CHR.)

Vitruv (VII praef. 16) erwähnt, daß die Architekten Daphnis von Milete und Paionios

von Ephesos den Baubeginn (ca. 350 v. Chr.) in Didyma betreut haben. Paionios hatte schon eine Zeitlang erfolgreich am Artemision von Ephesos gearbeitet, und wurde deshalb nach Didyma berufen<sup>74</sup>. Die Entfernung von Didyma bis Ephesos ist ca. 70 km. Es ist zu erwarten, daß Paionios in Didyma und Ephesos dasselbe Fußmaß angewendet hat. Wesenberg hat die Arbeiten von Wood (1870-74), Wilberg (1894), und Henderson (1904-05) nachgeprüft<sup>75</sup>. Er folgert, daß Wilbergs Planaufnahme des Artemision von Ephesos sich als besonders zuverlässig erweist und ich schließe mich seiner Ansicht an. Der Didymeion-Fuß von 29,86 cm liegt der Tabelle 3 zugrunde.

Tabelle 3. Artemision von Ephesos.			
	gemessen (m)	Idealmaß	IF
Normaljoch der Langseiten	5.23	5.22,6	17 1/2
erweitertes Joch der Langseiten im Bereich der Fronthallen des archaischen Tempels	6.00	6.00,9	20 1/8
4. Joch (Mitteljoch) der Front		8.95,8	30
3. und 5. Joch der Front		7.09,2	23 3/4
1., 2., 6. und 7. Joch der Front	6.16	6.15,9	20 5/8
Summe 3.-5. Joch der Front	23.15	23.14,2	77 1/2
Gesamtsumme der Frontjoche	47.79	47.77,6	160

Die Summe ist einen runden Fußbetrag, die Kontraktion der Frontjoche (6 1/4' und 6 1/4' + 1/2 x 6 1/4') ist proportioniert und die Idealmaße differieren kaum vom Befund. Die Anwendung des Fußmaßes von 29,86 cm kann als gesichert gelten.

#### DAS RELIEF IN OXFORD

Herodot hat gelegentlich Mitteilungen über Maße gemacht. Man sollte annehmen, daß er niemals etwas erwähnt, was jeder Grieche zu seiner Zeit geläufig war. Sicherlich die Bemerkung (II 149) hinsichtlich der Höhe von 100 Klafter zweier Pyramiden "ein Klafter rechnet sechs Fuß" hat seine aufmerksamen Leser in Ionien in Erstaunen versetzt.

Das metrologische Relief in Oxford ist in jüngster Zeit von Wesenberg und Fernie neu behandelt worden<sup>76</sup>. Wesenberg beschrieb das Relief (*Fig. 3*) folgendermaßen<sup>77</sup>: "In Ashmolean Museum zu Oxford wird ein Relief in der Form eines beidseitig gekappten Giebelfeldes aufbewahrt. Es zeigt in kräftigem Flachrelief das Brustbild eines unbekleideten Mannes mit weit ausgebreiteten Armen. Oberhalb des rechten Oberarms des Mannes ist der

Abdruck eines rechten Fußes in vertieftem Relief ausgeführt. Die neuzeitliche Ergänzung des Reliefs etwa ab der Mitte des linken Unterarms, ..., ist heute abgenommen". Die ausgebreiteten Arme des Mannes bringen das Maß eines Klafters zur Darstellung. Die praktische Verwendung des Reliefs als Eichmaß ist gewiß auszuschließen da das Klafter nicht exact abgegriffen werden kann, weil die Brust des Mannes weiter vorn liegt als die Spitzen der Mittelfinger. Fernie hat das Relief als Giebelfüllung gedeutet<sup>78</sup>. Die Metrologie unterstützt Fernies Lösung bestens: die halbe Länge des Gegenstands ist 104,5 cm und 3 1/2 IF = 3 1/2 x 29,86 = 104,51 cm.

Das Klafter und der Fuß gehören selbstverständlich zum gleichen Maßsystem. Aus der Verwendung des ionischen Fußes für die Ausmaße ist zu schließen, daß das Klafter und der Fuß geringfügig

<sup>74</sup> Haselberger 1983, 114 Anm. 92.

<sup>75</sup> Wesenberg 1983, 52.

<sup>76</sup> Wesenberg 1976, Fernie 1981.

<sup>77</sup> Wesenberg 1976, 15.

<sup>78</sup> Fernie 1981, 261: "The width and the angle of the surface point to its being set over a door, perhaps the entrance to a room devoted to the control of weights and measures". Fernie gibt die Rekonstruktion in einer Profilzeichnung.



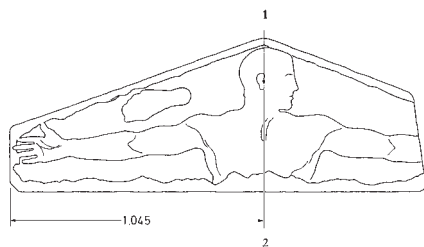


Fig. 3. Das metrologische Relief in Oxford (nach Wesenberg).

in verjüngtem Maßstab dargestellt worden sind. Die gemessene halbe Länge des Klafters war 103,5 cm und die Länge des Fußes (gemessen 29,6 cm) übereinstimmend  $103,5 / 104,5 \times 29,86 = 29,57$  cm. Das ionische Klafter rechnet mithin nicht 6 sondern 7 ionische Fuß. Es ist also abzulehnen, das Relief mit dem athenischen Dekret über die Zwangseinführung athenischer Maße in den Städten des Seebundes zu verbinden<sup>79</sup>. Nach dem Stil dürfte das Relief im fünften Jahrhundert v. Chr. entstanden sein. Der Herkunftsort ist unbekannt. Der Vertreter des ehemaligen Besitzers besuchte u.a. Chios, Ephesos, Smyrna und Samos.

#### DER HERATEMPEL VON SAMOS (CA. 530 V. CHR.)

Die samische Elle – nach Herodot (II 168) identisch mit der ägyptischen Elle – ist zu 52,256 cm bestimmt. Das entspräche einem Fuß von  $16/28 \times 52,256 = \text{ca. } 29,86$  cm. Herodot war geboren, wie er in der Einleitung zu seinem Geschichtswerk sagt, in Halikarnaß, einer Stadt in der Südwestecke von Kleinasien. Es ist deshalb nützlich zu wissen, was Jeppesen und Zahle<sup>80</sup>, die Ausgräber des Mausoleums von Halikarnaß, konstatiert haben: “Last, but not least, we have to tackle the controversial problem regarding which size foot-unit was employed in the Mausoleum. Thus far, our measurements indicate that units of ca. 30 cm. (often 29.9 precisely) and multiples of this unit must have prevailed in the principal dimensions of the Mausoleum”. Es kommt jetzt nur darauf an zu beweisen, daß das Fußmaß von 29,86 cm in Samos angewendet worden ist. Die Entfernung von Didyma nach Samos beträgt ca. 50 km. Die Ausgrabung hat vom polykratischen Heraion nicht wesentlich mehr zum Vorschein gebracht als die Fundamente. Der Architekt hat jedoch durch

Ritzlinien auf der Euthynterie und auf den Blöcken, durch Angabe der Säulenmittelpunkte und der Ritzlinienkreuze auf den Stylobatblöcken seine Absichten für den Aufbau des Tempels wie auf einem riesigen Reißbrett im Grundriß festgelegt. Zusammen mit den wenigen noch in situ liegenden Säulenbasen und der einen stehenden Säule war es trotzdem möglich eine große Menge von Maßen mit größtmöglicher Genauigkeit zu nehmen. Es war allerdings nicht möglich die Gesamtlänge der 23 Joche der Langseiten zu messen, da die Meßpunkte der ersten Säule (von Osten) und der 22., 23. und 24. Säule leider fehlten. Reuther hat vorausgesetzt, daß das erste Joch die gleiche Länge hatte wie das zweite (gemessen: 4.93,5 m) und daß auch Joch 21 (indirekt gemessen: 4.67,6 m) und die Joche 22 und 23 die gleiche Größe hatten. Die gemessene Gesamtbreite der Frontjoche schwankte geringfügig, da die Messungen nicht auf einer Ebene vorgenommen werden konnten<sup>81</sup>. Zur Kennzeichnung sind solche Maße samt den aus ihnen abgeleiteten Werten in Klammern gesetzt (Tab. 4). Nach unserer Meinung war das östlichste Langseitenjoch etwas größer als das zweite Joch. So wird eine harmonische Abstufung der drei östlichen Joche gewonnen (Fig. 4). Die zweite Annahme Reuthers, die drei westlichen Joche seien gleichlang entworfen worden, haben wir uns zu eigen gemacht. Daraus ist ersichtlich, daß klare Verhältnisse existieren: Joch 4 bis einschließlich Joch 8 : Joch 9 bis einschließlich Joch 23 = 1 : 3. Die von Dinsmoor und Lorenzen vermutete Säulenstellung stimmt nicht mit dem Baubefund überein<sup>82</sup>.

Das vorgeschlagene Fußmaß gibt befriedigende Ergebnisse mit wenig gebrochenen Fußwerten, Beibehaltung der herkömmlichen Teilung des Fußes für die Teilmaße und die Gesamt-

<sup>79</sup> Wesenberg 1976, 17 und 20-22. Dörpfeld (1882) hat ein attisches Fußmaß von 29,57 cm abgeleitet und mit dem römischen Fuß gleichgesetzt. Aber (1890, 168) hat Dörpfeld den Erechtheion-Fuß (32,6 bis 32,8 cm) wiedergefunden und seine frühere Arbeit widerrufen.

<sup>80</sup> Jeppesen und Zahle 1975, 78. Kommt hinzu: “there is also technical evidence indicating a close relationship between the temple at Tegea and the Mausoleum” und weiter “It should be noted that a unit of practically the same size (29.85 cm) was used in the temple of Athena Alea at Tegea”.

<sup>81</sup> Reuther 1957, 55-57. Die Länge war nach Schede und v. Gerkan 1911 108.73,0 m, nach Reuther und v. Gerkan 1913 108.63,0 m. Die Breite war nach Schede und v. Gerkan 52.41,4 m, nach Reuther und v. Gerkan 52.45,0 oder 52.44,2 m und nach Reuther und Schleif 1927 52.44,6 m. Wir dürfen deshalb zur Erklärung des Entwurfs Toleranzen (Fronten ca. 5 cm und Langseiten ca. 10 cm) in Rechnung stellen.

<sup>82</sup> Dinsmoor 1950, 135, 339; Lorenzen 1970, 151.

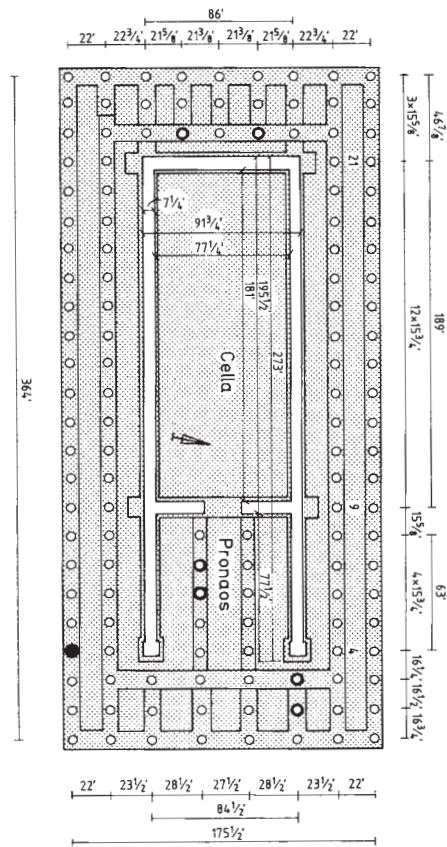


Fig. 4. Grundriß des Heratempels von Samos (nach Reuther); Fußmaße vom Verfasser.

abmessung und geringe Ausführungsdifferenzen. Vielleicht ist es nützlich zu bemerken, daß samische Architekturformen im unteritalischen Lokri auftreten.

#### DER ATTISCHE FUß (AF) UND DER RÖMISCHE FUß (PM)

Versuchen wir nun unsere These zu erhärten, daß römischer, ionischer und attischer Fuß sich verhalten wie 63 : 64 : 70. Für die Bestimmung des attischen (= Erechtheion-) Fußes ist eine Aussage Wesenbergs heranzuziehen<sup>83</sup>: "Vergleich der Jochmaße des Zeustempels von Olympia (5.215-5.22) und des Artemision von Ephesos (Normaljoch der Langseiten zwischen 5.213 und 5.230); die Maße sind praktisch identisch und können nur als 16 PF in Olympia bzw. 15 IF in Ephesos interpretiert werden". Die neue Rechnung  $17 \frac{1}{2} \times 29,86$  (IF, Ephesos) = 522,55 : 16 ergibt den attischen Fuß (AF, Olympia) von 32,659.. cm, aufgerundet 32,66 cm. Nach v. Gerkan (oben), Büsing<sup>84</sup> und meine Auffassung ist der römische Fuß  $\frac{9}{10}$  des attischen Fußes = 29,394 cm. Belege für irgendwelches Verhältnis fehlen. Aus diesem Grunde halten manche den römischen und attischen Fuß für identisch und wird der Fuß von ca. 32,66 cm pheidonisch genannt weil Herodot (VI

<sup>83</sup> Wesenberg 1983, 19. PF dort pheidonischer Fuß.

<sup>84</sup> Büsing 1982, 9: ein dorischer Fuß = 32,65289 cm, ein attischer Fuß = 29,38760 cm. Jedoch AF bzw. PM nach meiner Auffassung.

Tabelle 4. Heratempel von Samos.

	gemessen (m)		Idealmaß		ionischer	Fuß
Ostfront:						
Eckjoch (2)	6.57,7	13.15,4	6.56,9	13.13,8	22	44
Joch (2)	(7.04,3)	(14.08,6)	7.01,7	14.03,4	$23 \frac{1}{2}$	47
Joch (2)	8.49,7	16.99,4	8.51,0	17.02,0	$28 \frac{1}{2}$	57
Mitteljoch		8.21,6		8.21,2		$27 \frac{1}{2}$
Summe der Joche		(52.45,0)		52.40,4		$175 \frac{1}{2}$
Westfront:						
Eckjoch (2)	6.57,7	13.15,4	6.56,9	13.13,8	22	44
Joch (2)	6.78,9	13.57,8	6.79,3	13.58,6	$22 \frac{3}{4}$	$45 \frac{1}{2}$
Joch (2)	(6.48,1)	(12.96,2)	6.45,7	12.91,4	$21 \frac{5}{8}$	$43 \frac{1}{4}$
Mitteljoch (2)	6.37,8	12.75,6	6.38,3	12.76,6	$21 \frac{3}{8}$	$42 \frac{3}{4}$
Summe der Joche		(52.45,0)		52.40,4		$175 \frac{1}{2}$
Langseiten (von Osten)						
1 Joch	(5.00,0)			5.00,2		$16 \frac{3}{4}$
2. Joch	4.93,5			4.92,7		$16 \frac{1}{2}$
3. Joch	4.84,2			4.85,2		$16 \frac{1}{4}$
4.-7. Joch, i.D.	4.69,8	18.79,1	4.70,3	18.81,2	$15 \frac{3}{4}$	63
8. Joch	4.65,6			4.66,6		$15 \frac{5}{8}$
9.-20. Joch, i.D.	4.70,4	56.44,3	4.70,3	56.43,6	$15 \frac{3}{4}$	189

	gemessen (m)		Idealmaß		ionischer	Fuß
21.-23. Joch	(4.67,6)	(14.02,8)	4.66,6	13.99,8	15 $\frac{5}{8}$	46 $\frac{7}{8}$
Summe der Joche		(108.69,5)		108.69,0		364
Cella, lichte Breite		23.05,4		23.06,7		77 $\frac{1}{4}$
Cella, lichte Länge		54.01,9		54.04,7		181
Cella, äußere Breite		27.36,6		27.39,7		91 $\frac{3}{4}$
Cella, äußere Länge		58.37,4		58.37,6		195 $\frac{1}{2}$
Pronaos, lichte Länge		23.16,5		23.14,2		77 $\frac{1}{2}$
Cellabau, äußere Länge		81.54,0		81.51,8		273
Wandstärke		2.15,6		2.16,5		7 $\frac{1}{4}$

127) berichtet, daß Pheidon von Argos den Peloponnesiern die Maße gab.

Die Länge des römischen Fußes oder *pes monetalis* (PM) ist umstritten. Die Bestimmung seiner Länge aus den erhaltenen Fußmaßstäben, Modelle von Maßstäben auf Monumenten, Messungen an Bauten, Nachmessung einer Distanz zwischen Meilensteine mit Distanzangaben, Vergleichung mit der ägyptischen Elle oder dem campanischen Fuß, Berechnung aus dem Hohlmaß Quadrantal, usw. führte nicht zu einem übereinstimmenden Resultat. Heutzutage allgemein anerkannte Werte sind ca. 29,4 cm (neuere Bauforschung, nach Hultsch seit Ende des zweiten Jahrhunderts n. Chr.), ca. 29,6 cm (ältere Bauforschung, weiter z.B. Hultsch und Chantraine) und ca. 29,7 cm (Hultsch und Chantraine)<sup>85</sup>. Wir müssen also zwei angebliche Längen beseitigen und die Länge von 29,394 cm an einem stadtrömischen Bauten aus republikanischer Zeit einwandfrei nachweisen. Aus einer Notiz des Gromatikers Hyginus (ca. 100 n. Chr.) ist abzuleiten, daß der campanische Vorsus von 10000 Quadratfuß gleich 8640 römischen Quadratfuß sei<sup>86</sup>. Falls der campanische oder oskische (?) Fuß z.B. in Pompeii an Bauten nachzuweisen ist, kann der römische Fuß durch Berechnung ermittelt werden. So schrieb Hultsch<sup>87</sup>: „der oskische Fuß, sowohl aus der Nachmessung von Monumenten genau bestimmt, als auch nach seinem Verhältnis zum römischen Fuß bekannt ist ..., und sich von dieser Gleichung aus genau 295,7 Millim. für den römischen Fuß ergeben“. Nissen war der Altmeister der Bauforschung in Pompeii. Nissen<sup>88</sup> schrieb: „Ich hatte nach Rapers Untersuchungen, dem Hultsch ... folgt, den römischen Fuß gerechnet zu 0,29574 M. Derselbe ist offenbar etwas zu klein. ... Ich glaube, daß man der Wahrheit am meisten entsprechen wird, wenn man den römischen Fuß nicht höher rechnet als 0,296 M. ... und kann auch ohne Bedenken auf die Reduction der Gleichung der Gromatiker übertragen werden. Damit erhalten wir für den oskischen Fuß 0,2751323 M. Hiervon weicht die Bestimmung aus der Mauerdicke noch

nicht ganz 2 Millimeter ab“. Es ist klar, daß Hultsch und Nissen ein rechnerisches Spiel betrieben haben. Nissen hat seine eigenen Schlußfolgerungen zwar ausgewertet aber nicht in der Gleichung Hygins eingeführt. Nissen<sup>89</sup> bemerkt: „Es ergibt sich ohne irgend erwähnenswerte Abweichung als constante Dicke 0,41 M. sowohl für die Fronten und Außenwände als für die Innenwände des Hauses. Dies Resultat stützt sich auf eine große Zahl von Messungen. ... Mithin ist die oskische Elle 0,41 M., der oskische Fuß 0,27333 M“. Die Gleichung Hygins ergibt dann den Wert von 29,40 cm für den römischen Fuß.

Wie Hultsch schon eingesehen hat, ist das attische Talent Wasser- oder Weingewicht von den Römern als Hohlmaß für Flüßiges (Quadrantal oder Amphora) und Trockenes (Trimodium) übernommen worden<sup>90</sup>. Unter der Annahme, daß in Griechenland schon früh ein geschlossenes Maßsystem in Anwendung gewesen sei, ist zu schließen, daß die spätere Gleichstellung dieses Hohlmaßes mit einem römischen Kubikfuß eine nur ungefähre, also keine mathematisch genaue ist<sup>91</sup>. Hingegen, ist

<sup>85</sup> Hultsch 1882 (Nachdruck 1971), 88-98, aus dem Hohlmaß (29,73 cm) 91 und 125-126. Hultsch rechnete mit Wasser bei einer Temperatur von 19 Grad C., ein Pfund von 327,453 Gramm und eine Amphora von 26,263 Liter. Chantraine 1967, 655-656 (1 Kubikfuß = 1 Quadrantal oder Amphora von 26,196 kg Wasser ergibt einen Fuß von 29,7 cm). Chantraine, dem ich folge, rechnete mit Wasser größter Dichte unter Reduzierung des Gewichtes auf den luftleeren Raum, d.h. er zog die Kubikwurzel aus 80 x 327,45. Lex Silia: 1 Quadrantal = 80 römische Pfund im Weingewicht.

<sup>86</sup> Hultsch 1882, 671 Anm. 2 oder Nissen 1877, 75.

<sup>87</sup> Hultsch 1882, 94.

<sup>88</sup> Nissen 1877, 86.

<sup>89</sup> Nissen 1877, 84-85.

<sup>90</sup> Hultsch 1882, 112-117 und 506. Chantraine 1963, 667-672 (Quellen für: Quadrantal = Amphora = Trimodium = pes quadratus = pes solidus). Im Friedensvertrage von 189 v. Chr. (Livius 38, 38, 13) wurde ausbedungen „Argenti probi Attica talenta ...: talentum ne minus pondo LXXX Romanis ponderibus pendat“.

<sup>91</sup> Römischer Brauch war es, die genaue Eichung der Hohlmaße nach Gewicht zu vollziehen: „Uti quadrantal vini LXXX pondo siet; congius vini X p(ondo) siet;...“ (Lex Silia, ca. 200 v. Chr.).



nun das griechische Hohlmaß und Gewicht wirklich von einem attischen Längenmaß abhängig, so muß sich das Quadrantal natürlich mathematisch genau einordnen lassen. Der Versuch von Hultsch scheiterte daran, daß der wirkliche attische Fuß und die zugehörige Elle damals noch unbekannt waren<sup>92</sup>. Jetzt sind Fuß und Elle bekannt und kann nebenbei die Norm des römischen Pfundes aus einem erhaltenen römischen Congius (Hohlmaß für Flüssiges) genauer angesetzt werden. Es stellt sich heraus, daß die attische Kubikelle genau  $4 \frac{1}{2}$  Quadrantal entspricht:

$3,266 \text{ dm (AF)} \times \frac{3}{2} = 4,899 \text{ dm (Elle)}$ , ergibt  $117,577 \text{ l (Kubikelle)} : 4 \frac{1}{2} = 26,128 \text{ l (Quadrantal)}$  oder  $\text{kg Wasser/Wein (attisches Talent)} : 80 = 0,3266 \text{ kg (Norm des römischen Pfundes)} \times 10 = 3,266 \text{ l (Congius)}$ <sup>93</sup>.

Damit sind zwei angebliche Längen des römischen Fußes beseitigt und ist die Länge des attischen Fußes befestigt. Es bleibt uns noch zu beweisen, daß nur mit Anwendung des römischen Fußes (PM) von  $\frac{9}{10} \text{ AF} = 29,394 \text{ cm}$  der Entwurf eines frühen römischen Tempels einleuchtet.

#### DER RUNDTEMPEL AM TIBER IN ROM

Wie Knackfuß bezüglich des Apollontempels von Didyma, haben Rakob und Heilmeyer für den Rundtempel (ca. 100 v. Chr.) zwei Fußmaße angenommen, d.h., für den Grundriß 33,04 cm und für den Aufriß 29,42 cm<sup>94</sup>. Die Einwände Büsings hinsichtlich der Anwendung zweier Längenmaße sind in diesem Fall nicht zutreffend, weil Rakob und Heilmeyer seltsamerweise für den Grundriß den drusianischen Fuß haben vorgeschlagen<sup>95</sup>. Es kann

sich deshalb um ein Modulmaß von  $1 \frac{1}{8} \text{ PM}$  handeln<sup>96</sup>. Doch glaub ich nicht, daß wirklich ein Modulmaß beim Entwurf verwendet worden ist, da das ganze Problem sich löst wenn die Grundrißanalyse mit dem genauen metrischen Wert des PM durchgeführt wird. Rakob und Heilmeyer schrieben<sup>97</sup>: “daß die Weite der Ringhalle den gemeinsamen Nenner der Hauptmaße bildet, kann in der Strecke von 3,304 Meter das Basismaß für den Entwurf gesucht werden”. Sie waren zurecht nicht zufrieden mit 11 römischen Fuß von 29,42 cm und ein Fehler von + 6,8 cm und bewerteten die Strecke mit 10 Fuß von 33,04 cm. Aber warum soll man eine glatte Zahl bevorzugen oder ein – für Rom – unwahrscheinliches Fußmaß zugrundelegen? Die Breite der Ringhalle ist mit  $11 \frac{1}{4} \times 0,29394 = 3,30,7 \text{ m}$  gebührend erklärt. Mit Anwendung der Teilung des Fußes in 16 Daktylen ist der Entwurf des Grundrisses in Fuß leicht zu verstehen und erhellt zugleich, daß die Strecke von  $11 \frac{1}{4} \text{ Fuß}$  wichtiger war als Rakob und Heilmeyer dargetan haben:

*Gesamtdurchmesser* ( $73 \frac{1}{8}' = 6 \frac{1}{2} \times 11 \frac{1}{4}'$ ) = Stufenfundament ( $8 \frac{7}{16}'$ ) + Stylobatdurchmesser ( $56 \frac{1}{4}'$ ) + Stufenfundament ( $8 \frac{7}{16}'$ );  
Stufenfundament =  $5 \times 11 \frac{1}{16}'$ .

*Stylobatdurchmesser* ( $56 \frac{1}{4}' = 5 \times 11 \frac{1}{4}'$ ) = Ringhallenbreite ( $11 \frac{1}{4}'$ ) + Celladurchmesser ( $33 \frac{3}{4}'$ ) + Ringhallenbreite ( $11 \frac{1}{4}'$ );  $11 \frac{1}{4}' = 4 \frac{1}{4}'$  (Säulenbasisbreite) +  $7'$  (Breite des Umgangs um die Cella).

*Celladurchmesser* ( $33 \frac{3}{4}' = 3 \times 11 \frac{1}{4}'$ ) = Wandstärke ( $2 \frac{3}{8}'$ ) + lichte Weite der Cella ( $29'$ ) + Wandstärke ( $2 \frac{3}{8}'$ ).

Tabelle 5 gibt die Idealmaße in Metern unter Zugrundelegung des festen römischen Fußes von 29,394 cm.

<sup>92</sup> Hultsch 1882, 66-67 (angeblicher Parthenon-Fuß von 30,83 cm), 510-511 (Die Hohlmaße stimmen nicht mit dem Kubus dieses Fußes oder der Elle).

<sup>93</sup> Der römische Congius in Neapel faßt 3,265 l. Laut Inschrift war das Nettogewicht der Füllung P(ondo) X. Siehe Viedebantt 1923/24, 157 Anm. 1 und 161 Anm. 3. Chantraine (1963, 670) erwähnt die richtige Fassung, nennt ihn aber den farnesischen Congius. Laut Viedebantt (nach Dressel) ist der farnesische Congius (damals in Dresden) gefälscht. Das Drittel der attischen

Kubikelle = 39,192 l (Metretres, für Flüssiges, s. Hultsch 1882, 510) oder kg Wasser (Talent von 120 Pfund, s. Vitruv X 15, 7).

<sup>94</sup> Rakob und Heilmeyer 1973, 16ff.

<sup>95</sup> Büsing 1986, 205; Hultsch 1882, 693 Anm. 7 (Quelle Hyginus, ca. 100 n. Chr.): “Item dicitur in Germania in Tungris pes Drusianus, qui habet monetalem pedem et sescunciam”. Also  $\text{PD} = \frac{9}{8} \text{ PM} = 33,06825 \text{ cm}$ .

<sup>96</sup> Vgl. Coulton 1975, 88.

<sup>97</sup> Rakob und Heilmeyer 1973, 16.

Tabelle 5. Rundtempel (20 Säulen) am Tiber in Rom<sup>98</sup>.

	gemessen (m)	Idealmaß	Fuß
Gesamtdurchmesser	21.50,7 = 16.51,7 + 2.49 + 2.5	21.49,4	73 $\frac{1}{8}$
Stylobatdurchmesser	16.51,7	16.53,4	56 $\frac{1}{4}$
Stufenfundamentbreite <sup>99</sup>	2.49 -2.5	2.48,0	8 $\frac{7}{16}$
Ringhallenbreite	3.30,4-3.33,8 (i.D. 3.31,7)	3.30,7	11 $\frac{1}{4}$
Säulenbasisbreite	1.21,9-1.28,0 (i.D. 1.24,3)	1.24,9	4 $\frac{1}{4}$
Umgangsbreite	2.04,3-2.08,5 (i.D. 2.07,0)	2.05,8	7
Celladurchmesser	9.90,6-9.90,9	9.92,0	33 $\frac{3}{4}$
Cellawandstärke	0.68,8	0.69,8	2 $\frac{3}{8}$
lichte Weite der Cella	8.53,0-8.53,3	8.52,5	29
unterer Säulendurchmesser	0.95,0-0.96,0 (i.D. 0.95,4)	0.95,5	3 $\frac{1}{4}$
Säulenhöhe	9.16,0-9.20,7 (i.D. 9.18,4)	9.18,6	31 $\frac{1}{4}$
Kapitellhöhe	1.21,7-1.27,3 (i.D. 1.25,2)	1.24,9	4 $\frac{1}{4}$
Öffnungsweite der Cellatür	2.93,9-2.94,2	2.93,9	10

Wie groß war also der römische Fuß? Fast genau 29,394 cm! In der gängigen Literatur findet man jedoch mit etwa 29,57 cm einen Querschnitt der größeren Werte favorisiert<sup>100</sup>. Eine Tabelle, wie Tabelle 5, mit einer Variante des römischen Fußes anfertigen, ist nicht schwierig. Aber kann man danach den Entwurf verstehen? Versuchen wir also unter Zugrundelegung eines Fußes von 29,6 cm Klarheit zu schaffen.

#### Gesamtdurchmesser.

A:  $72 \frac{5}{8}' = 6 \frac{1}{2}' \times 11.173'$  (21.49,7 m)

B:  $72 \frac{23}{32}' = 6 \frac{1}{2}' \times 11 \frac{3}{16}'$  (21.52,5 m)

C:  $72 \frac{13}{16}' = 6 \frac{1}{2}' \times 11.201'$  (21.55,3 m)

D:  $73 \frac{1}{8}' = 6 \frac{1}{2}' \times 11 \frac{1}{4}'$  (21.64,5 m)

#### Teilmaße.

A: Stufenfundament  $8 \frac{7}{16}' = 5 \times 1 \frac{11}{16}'$ ;

Stylobatdurchmesser  $55 \frac{3}{4}' = 5 \times 11.15'$ .

B: Stufenfundament  $8 \frac{25}{64}' = 5 \times 1.678'$ ;

Stylobatdurchmesser  $55 \frac{13}{16}' = 5 \times 11 \frac{3}{16}'$ .

C: Stufenfundament  $8 \frac{7}{16}' = 5 \times 1 \frac{11}{16}'$ ;

Stylobatdurchmesser  $55 \frac{13}{16}' = 5 \times 11 \frac{3}{16}'$ .

D: Stufenfundament  $8 \frac{7}{16}' = 5 \times 1 \frac{11}{16}'$ ;

Stylobatdurchmesser  $56 \frac{1}{4}' = 5 \times 11 \frac{1}{4}'$ .

Kommt hinzu: Celladurchmesser (gemessen 9.90,6-9.90,9 m) =  $33 \frac{1}{2} \times 0.29,6 = 9.91,6$  m (A, genau; jedoch  $33 \frac{1}{2}' = 3 \times 11 \frac{1}{6}'$ ) oder (B und C)  $3 \times 11 \frac{3}{16}'$  (ungenau) oder (D)  $3 \times 11 \frac{1}{4}'$  (sehr ungenau). Analyse: der Entwurf (A, B und C) ist entweder nicht in Fuß durchzuführen, oder die Prinzipien, auf den der Entwurf beruht, sind nicht zu erkennen. Der Entwurf D ist klar, doch sehr ungenau ausgeführt worden. Bleiben wir doch besser beim festen römischen Fuß von 29,394 cm und die genaue Ausführung des Entwurfs D. Die Metrologie ist weitgehend geklärt worden. Es sind jedoch später Zweifel aufgekomen zum Basismaß des Entwurfs. Vitruv (IV 8) muß den

Rundtempel in Rom gekannt haben, erwähnt ihn aber nicht<sup>101</sup>. Die Ausführung eines Rundtempels über einem Grundriß der einer regelmäßigen geometrischen Figur entspricht, setzt einen geeigneten Plan voraus. Vitruv (I 1, 4) erwähnt, daß je nach Bedarf beim Zeichnen des Entwurfs der Zirkel gebraucht wird. Statt des Zirkels am Reißbrett, wurde an der Baustelle im Zentrum des Grundrisses des Tempels eine markierte Schnur befestigt, mit der die konzentrischen Maße auf das Fundament abgetragen werden können.

Es wird sich noch zeigen, daß in klassischer Zeit Entwurfsmaße vorkommen, die bis zum  $\frac{1}{32}$  Fuß gebrochen sind<sup>102</sup>. Dann ist nichts im Wege eine derartige Verfeinerung in später Zeit auch für Rom in Anspruch zu nehmen. Daraus ist zu folgern, daß die Strecke von  $11 \frac{1}{4}'$  aller Wahrscheinlichkeit nach nicht das Basismaß des Entwurfs ist. Anscheinend hat der Architekt dem Tempel (Fig. 5) eine Einheit (E) von  $\frac{9}{16}$  Fuß zugrundegelegt ( $11 \frac{1}{4}' = 20$  E). Vermutlich wurde im Maßstab 1 : 10 gezeichnet (Stylobatdurchmesser = 100 E). Tabelle 6 gibt die Entwurfsmaße. Abgeänderte Maßzahlen in Fuß (s.o. Tabelle 5) sind eingeklammert.

<sup>98</sup> Meßwerte in m nach Rakob und Heilmeyer 1973, 16-18 und Beilage 1.

<sup>99</sup> Die Folgerung von Rakob und Heilmeyer (1973,16) "Breite des Stufenfundamentes 2.49-2.5 m" wird bestätigt durch die Schnitte A-B und C-D in Beilage 7. Die gemessene Breite ist 2.49-2.52 m (Beil. 6-8). Die Stufen sind nicht erhalten geblieben. Die Rekonstruktion der Stufen in Beilage 6 auf einer Strecke von 3.01 bis 3.07 m muß deshalb abgelehnt werden. Rakob und Heilmeyer haben 4 Stufen angenommen. Unten (Fig. 5) wird der Beweis geliefert, daß ein regelmäßiger Entwurf 5 Stufen erfordert. Diese Lösung verstößt nicht gegen den Baubefund.

<sup>100</sup> Hecht 1979, 108.

<sup>101</sup> Rakob und Heilmeyer (1973, 17) haben die von Vitruv geforderten Maßbeziehungen für Rundtempel kontrolliert. Sie stimmen nur teilweise.

<sup>102</sup> s.u. Anm. 142.

A

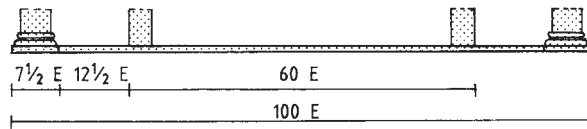
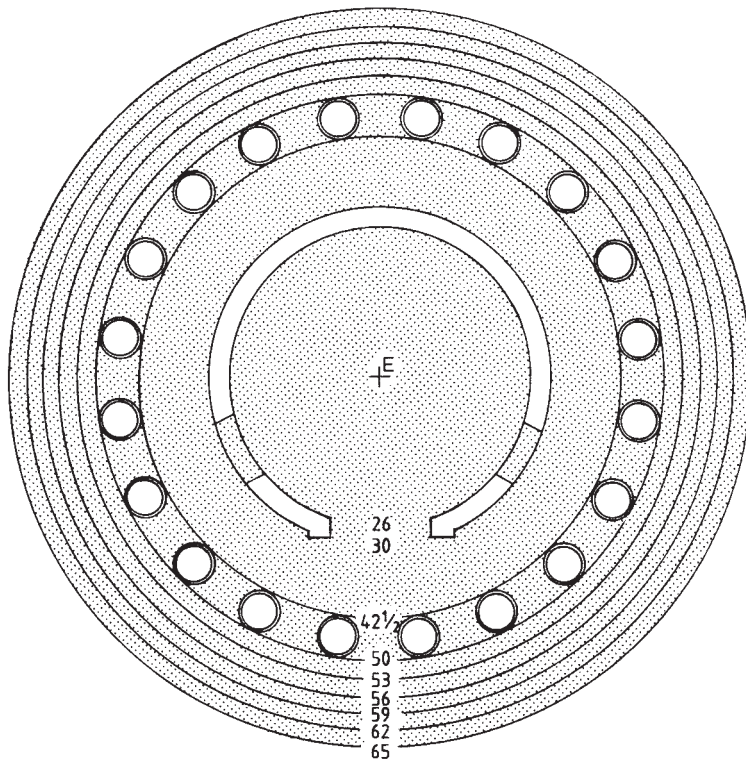


Fig. 5. Rundtempel am Tiber in Rom.  
A. Entwurfsvorgang. B. Rekonstruktion  
der Stufen.

B

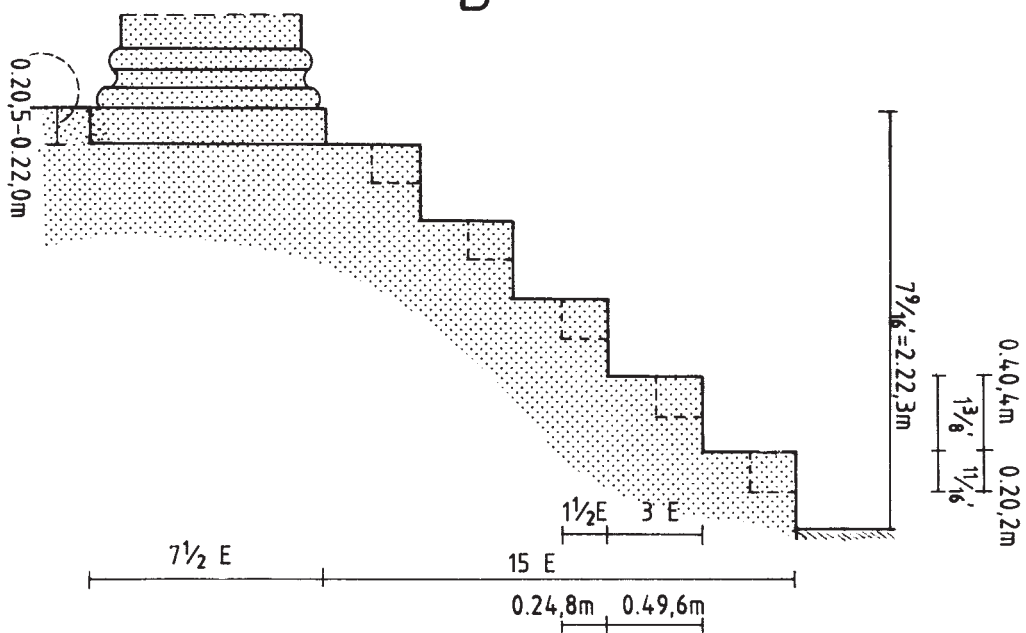




Tabelle 6. Rundtempel am Tiber in Rom (Entwurfsmaße 1. Phase).				
	gemessen (m)	Idealmaß	Fuß	E
Durchm. der 1. Stufe	21.50,7	21.49,4	73 $\frac{1}{8}$	130
Durchm. der 2. Stufe		20.50,2	69 $\frac{3}{8}$	124
Durchm. der 3. Stufe		19.51,0	66 $\frac{3}{8}$	118
Durchm. der 4. Stufe		18.51,8	63	112
Durchm. der 5. Stufe		17.52,6	59 $\frac{5}{8}$	106
Stylobatdurchmesser	16.51,7	16.53,4	56 $\frac{1}{4}$	100
Ringhallenbreite	3.30,4-3.33,8 (i.D. 3.31,7)	3.30,7	11 $\frac{1}{4}$	20
Säulenbasisbreite	1.21,9-1.28,0 (i.D. 1.24,3)	1.24,0	(4 $\frac{7}{32}$ )	7,5
Umgangsbreite	2.04,3-2.08,5 (i.D. 2.07,0)	2.06,7	(7 $\frac{1}{32}$ )	12,5
Celladurchmesser	9.90,6-9.90,9	9.92,0	33 $\frac{3}{4}$	60
Cellawandstärke	0.68,8	0.66,1	(2 $\frac{1}{4}$ )	4
lichte Weite der Cella	8.53,0-8.53,3	8.59,8	(29 $\frac{1}{4}$ )	52

Die obersten Schichten des Stufenbaus sind verschwunden. Die in *Fig. 5B* im Maßstab 1 : 40 gezeichnete Rekonstruktion der Stufen paßt genau auf die erhaltenen Resten<sup>103</sup>. Die gestrichelten Linien sind die Treppenstufen zum Eintreten des Umgangs. Säulenbasis und Stufenbau sind im Verhältnis 1 : 2 entworfen worden.

Es läßt sich nicht sicher entscheiden, ob die Ringhallenbreite und die Säulenbasisbreite in Entwurfsphase 2 in bzw. 4  $\frac{1}{4}$  und 7 Fuß geändert worden sind. Die Wandstärke der Cella ist in Phase 2 um  $\frac{1}{8}$  vergrößert worden. Wie Rakob und Heilmeyer bereits beobachtet haben, war das Ausmaß der Cella entscheidend für das Planschema. Folglich wurde die lichte Weite der Cella durch die geänderte Mauerstärke auf 29 Fuß festgelegt.

#### PROPORTION ODER PRÄZISION: DER ZEUSTEMPEL VON AIZANOI (CA. 125 N. CHR.)

Wie schon erwähnt, hat v. Gerkan<sup>104</sup> drei Fußmaße im Verhältnis 27 : 30 : 32 zueinander gebracht. Die Bauforschung hat von den v. Gerkanschen Relationen bisher keinen Gebrauch gemacht, vermutlich weil mit dem angeblichen ionischen Fuß von 34,8672 cm wenig anzufangen war. Es hat sich inzwischen gezeigt, daß der wirkliche ionische Fuß eine Länge von ca. 29,86 cm hat. Die Bezeichnung der übriggebliebenen Fußmaße mußte geändert werden, doch die Längen sind etwa gleichgeblieben. Die Fußmaße stehen in einfachen, ganzzahligen Verhältnissen zueinander, d.h., PM : IF : AF = ca. 29,394 cm : ca. 29,86 cm : ca. 32,66 cm = 63 : 64 : 70. Wir werden dieses Resultat sofort am Tempel von Aizanoi ausnutzen. In der Folge werden versuchsweise die annähernd richtigen obigen Fußwerte verwendet und wird versucht zu beweisen, daß nur ein Fußmaß in Betracht kommen

kann. Diese Methode könnte Aufschluß geben wann und wo welcher Fuß zur Anwendung gekommen ist.

Es ist mehrfach behauptet worden, daß die Jochweiten der Front des Tempels zu Aizanoi in Phrygien einfache Verhältnisse aufweisen. Die Meßwerte sind 2.52, 3.11 und 3.74 m. Rein rechnerisch sind ausgewogene Proportionen ohne Schwierigkeiten zu erzwingen:

$$2.51,6 : 3.14,5 : 3.77,4 \text{ m} = 8 \frac{1}{2} : 10 \frac{5}{8} : 12 \frac{3}{4} = 4 : 5 : 6$$

Analyse: Wer behaupten möchte, daß die Joche vom Architekten exakt 4 : 5 : 6 proportioniert wurden, muß zugeben, daß Ausführungsdifferenzen in der Größenordnung von 3 cm entstanden sind. Läßt sich jedoch erweisen, daß die Differenzen niedriger als 1 cm sind, so ist zu schließen, daß mathematisch genaue Proportionen nicht angestrebt wurden. Die Auffindung der antiken Längeneinheit wird erleichtert falls die Bauausführung sehr genau ist und eine exakte Vermessung vorliegt. Geht man vom daktylischen System der Fußmaßteilung, wie es durch die fortlaufende Teilung durch den Divisor zwei bestimmt ist, aus, lassen sich gelegentlich die Verhältniszahlen 63 : 64 : 70 = PM : IF : AF anwenden zur Begründung des angewandten Fußmaßes. Die Gesamtsumme der Langseitenjochs des Zeustempels beträgt 35.28 m. Das Idealmaß ist 35.27,28 m. Die Umrechnung ergibt 120 römische oder 108 attische oder 118  $\frac{1}{8}$  ionische Fuß. Nun hat die Langseite 14 gleiche Joche. Das Achsmaß des Jochs ist mithin 8  $\frac{4}{7}$  PM oder 7  $\frac{5}{7}$  AF oder 8  $\frac{7}{16}$  IF. Folglich kann die Interpretation der Maße in PM oder AF nicht zu akzeptablen Ergebnissen führen. Die metrologische Untersuchung wird deshalb weitergeführt unter Zugrundelegung des

<sup>103</sup> Siehe dazu Rakob und Heilmeyer 1973, Beilage 6, 7 und 8. Die Schnitte da sind ebenso im Maßstab 1 : 40 gezeichnet.

<sup>104</sup> s.o. Anm. 19.

Tabelle 7. Zeustempel von Aizanoi.			
	gemessen (m)	Idealmaß	IF
1., 2., 6. und 7. Joch der Front	2.52	2.51,9	$8 \frac{7}{16}$
3. und 5. Joch der Front	3.11	3.11,7	$10 \frac{7}{16}$
4. Joch (Mitteljoch) der Front	3.74	3.73,3	$12 \frac{1}{2}$
Gesamtsumme der Frontjoch (AWF)	20.04	20.04,4	$67 \frac{1}{8}$
Stylobatbreite (SB)	21.35	21.35,0	$71 \frac{1}{2}$
SB – AWF			$4 \frac{3}{8}$
Joch der Langseiten	2.52	2.51,9	$8 \frac{7}{16}$
Gesamtsumme (AWL) der Langseitenjoch(14)	35.28	35.27,2	$118 \frac{1}{8}$
Stylobatlänge (SL)	36.59	36.57,9	$122 \frac{1}{2}$
SL – AWL			$4 \frac{3}{8}$
unterer Säulendurchmesser	0.96,4	0.97,0	$3 \frac{1}{4}$
Säulenhöhe	9.55	9.55,5	32

ionischen Fußes von 29,86 cm. Der Zeustempel zu Aizanoi (Fig. 6) ist etwa 5 Jahrhunderte später erbaut worden als der Apollontempel zu Didyma. Die Entfernung von Aizanoi bis Didyma ist ca. 350 km. Die Meßwerte sind dem Aufsatz von Weber entnommen worden<sup>105</sup>.

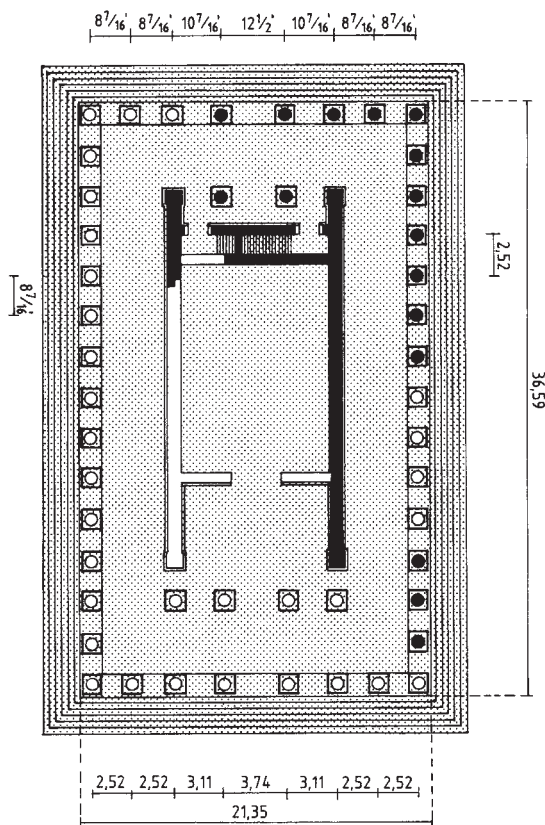


Fig. 6. Grundriß des Zeustempels von Aizanoi (nach Weber); Fußmaße vom Verfasser.

Es zeigt sich deutlich, daß der Tempel sehr genau erbaut worden ist. Die Behauptung, die Jochmaße seien vom Baumeister genau im Verhältnis 4 : 5 : 6 festgelegt, muß deshalb abgelehnt werden.

Die genaue Ausführung widerspricht ebenso die These, der Architekt hätte sich beim Entwurf des Tempels von einem Raster bedient, wie Weber<sup>106</sup> meinte: “Über die Stylobat-Plattform ist gleichsam ein Netz gleichgroßer Quadrate gelegt, in deren Mitte alle entscheidenden Punkte des Grundrisses liegen wie etwa die Achsen der ... Säulen” und weiter “Die Fläche zwischen den Plinthen hat beim Rastergrundriß die gleiche Größe wie die Plinthen”. Nach Weber war die Weite der Quadrate also gleich dem halben Normaljoch von 2.52 m. Darauf ist zu erwidern, daß erstens der Abstand (A) der Säulenplinthe von der Stylobatkante außer Betracht gelassen wurde. Zweitens ist  $21.35 : 1.26 = 16.944..$  und  $36.59 : 1.26 = 29.039..$ , statt 17 und 29. Schließlich darf angezweifelt werden, ob das Plinthenmaß (PM) und der Plinthenabstand (PA) wirklich gleich sind. In diesem Fall ergeben sich die Fußbeträge  $\frac{5}{64}$  (A),  $4 \frac{7}{32}$  (PM),  $4 \frac{7}{32}$  (PA), ..., d.h., alle Teilmaße sind stark gebrochen. Ein vernünftiger Architekt hätte sicherlich weniger gebrochene Fußbeträge festgelegt<sup>107</sup>:  $\frac{1}{16}$ .

<sup>105</sup> Weber 1969, 184-185. Siehe auch Naumann 1979. Naumann hat die Ausgrabungen von Krencker-Schede (1926 und 1928) bearbeitet. Die Stylobatlänge ist (Fig. 5) 36.48 m (Weber: 36.59 m). Nach unserer Meinung ist die Länge von 36.48 m nicht gemessen sondern errechnet worden: Angenommenes Fußmaß (S. 14) 29,6 cm, angenommene Jochweite  $8 \frac{1}{2}$  Fuß = 2.51,6 m, Hypothese: Plinthenmaß = Plinthenabstand = halbe Jochweite, Abstand Stylobatkante bis Plinthenkante außer Betracht gelassen (ca. 2 x 2 cm), folglich Stylobatlänge =  $14 \frac{1}{2}$  Jochweiten = 36.48,2 m.

<sup>106</sup> Weber 1969, 193-194.

<sup>107</sup> Leider war Webers Quelle für die Meßwerte (Le Bas-Landron 1847) mir unzugänglich, so daß nicht nachzugehen war ob das Plinthenmaß und der Plinthenabstand mehrfach vermessen worden sind und die Differenz von 2 cm bemerkt wurde. Naumann 1979 gibt nur Jochmaße.

(A)<sup>108</sup>, 4 1/4' (PM, 1.26,9 m), 4 3/16' (PA, 1.25,0 m), ...

Der Entwurf der Joche leuchtet erst ein wenn die Maße in Daktylen umgerechnet werden. Langseiten: 1'' (A), 68'' (PM), 67'' (PA), ... und Fronten: 1'' (A), 68'' (PM), 67'' (PA1), 68'', 67'', 68'', 99'' (PA2), 68'', 132'' (PA3), ... Der leitende Gedanke des Architekten ist nun einfach zu deuten. Zwei ästhetische Entwurfsprinzipien mußten miteinander in Einklang gebracht werden:

1. Der Entwurf soll möglichst regelmäßig sein: das Plinthenmaß gleich dem Plinthenabstand, d.h., PM = PA (Langseiten) und PM = PA1 (Fronten), ergibt PA = PA1 = 68''.

2. An den Fronten sollen die Plinthenabstände regelmäßig gestaffelt werden:

PA1 : PA2 : PA3 = 2 : 3 : 4, ergibt PA1 = 66''.

Ein ästhetisches Konzept fordert nicht unbedingt mathematische Genauigkeit. Nur nach Augenmaß muß der Architekt den Anforderungen gerecht werden. Er hat sich deshalb entschlossen PA und PA1 = 67'' auszuführen.

Am Apollontempel von Didyma ist noch in hadrianischer Zeit gearbeitet worden. Die späte

Anwendung des ionischen Fußes von 29,86 cm in Aizanoi macht glaubhaft, daß dieser Fuß in Didyma jederzeit beibehalten wurde.

Eine systematische Untersuchung ionischer Tempel könnte die Belege für die Anwendung des ionischen Fußes vermutlich vermehren. Als sicher darf gelten, daß auch dorische Tempel erneut überprüft werden müssen.

#### DER NEMESISTEMPEL VON RHAMNUS IN ATTIKA

Dieser Tempel ist ca. 435 v. Chr. im strengen dorischen Stil entworfen. Soll das heißen, daß der Tempel im dorischen<sup>109</sup> Fuß errichtet ist? Die Meßwerte sind dem Aufsatz Bankels entnommen<sup>110</sup>. Die metrischen Werte haben etwas Merkwürdiges an sich. Nicht weniger als zweimalig stehen 2 Strecken "millimetergenau" (wirklich gemessen?) und mit mathematischer Genauigkeit in einfachem Verhältnis zueinander. E ist der Abstand der Ecksäule von der Stylobatkante.

Tabelle 8. Nemesistempel von Rhamnus.

	gemessen (m)	Idealmaß	IF	Idealmaß	AF
Joch (J)	1.90,4	1.90,4	6 3/8	1.90,5	5 5/6
Eckjoch (JE)	1.73,0	1.73,6	5 13/16	1.73,5	5 5/16
Abstand E	0.41,2	0.41,1	1 3/8	0.40,8	1 1/4
JE + E	2.14,2	2.14,6	7 3/16	2.14,3	6 9/16
Stylobatbreite (SB) = 3J + 2JE + 2E	9.99,6	10.00,3	33 1/2	10.00,2	30 5/8
Stylobatlänge (SL) = 9J + 2JE + 2E	21.42,0	21.42,5	71 3/4	21.43,3	65 5/8
uD	0.71,4	0.70,9	2 3/8	0.71,4	2 3/16
Intercolumnium	1.19,0	1.19,4	4	1.19,1	3 31/48
uD der Ecksäule	0.72,8	0.72,8	2 7/16	0.72,5	2 7/32
SB : SL	7 : 15		nicht genau		genau
J : (JE + E)	8 : 9		nicht genau		genau

Die metrologische Untersuchung ist hiermit abgeschlossen. Doch es erhebt sich die wichtige Frage entweder das Intercolumnium ein grundlegendes Entwurfsmaß, oder nur – Jochweite minus uD – ein abgeleitetes Maß ist. In neueren Publikationen wird immer die Normteilung des Fußes in 16 Daktylen beibehalten. Sollte man jetzt davon zurückkommen? Waren die Verhältnisse im Entwurf nach dem Augenmaß oder mathematisch genau? Des Pudels Kern ist selbstverständlich, entweder hier der ionische Fuß, oder der attische vorzuziehen ist.

Die Lösung dieser Probleme ist den Bauforschern vorbehalten.

Nebenbei sei erwähnt, daß Nemesis die Personifikation des Begriffs nemesis, etwa Wahrerin des rechten Maßes, Vergelterin, ist.

<sup>108</sup> SB – AWF = SL – AWL = 4 3/8' (Tabelle 7). A = 1/2 x 4 3/8' – 1/2 PM = 2 3/16' – 2 1/8' = 1/16'.

<sup>109</sup> Nebst 'pheidonischem Fuß' wird die Bezeichnung 'dorischer Fuß' in der Bauforschung öfters für den Fuß in der Größe von 32,66 cm verwendet.

<sup>110</sup> Bankel 1983, 71-73.



Wir möchten jetzt versuchen zu erreichen, – siehe die Vorbemerkung – daß die Bauforscher sich einigen. Es ist deshalb angebracht die Voraussetzungen neu zu formulieren:

1. Die Untersuchung muß vom gesicherten Baubefund ausgehen.

2a. Das Teilungssystem des Fußes beruht stets auf der Halbierung. Festgestellte annähernde Verhältnisse (Hypothese: gemäß dem Entwurf annähernd) sind im metrologischen Sinne keine Verhältnisse, z.B. 64 Fuß x  $\frac{4}{9}$  = 28  $\frac{4}{9}$  Fuß, ausgeführt 28  $\frac{7}{16}$  Fuß.

2b. Festgestellte annähernde Verhältnisse (Hypothese: gemäß dem Entwurf genau) widerspiegeln sich unmittelbar in den ausgeführten Fußbeträgen, z.B. 127  $\frac{11}{16}$  Fuß x  $\frac{4}{9}$  = 56  $\frac{3}{4}$  Fuß<sup>111</sup>.

3. Die Entwurfsmaße sind (fast) genau ausgeführt worden. Ausführungsfehler sind hypothetisch bis zum Beweis des Gegenteils. Der moderne Forscher muß die (wenigen) Fehler entdecken und möglichenfalls dartun wie die Bauleitung den Fehlern abgeholfen hat.

4. Unter Zugrundelegung des angenommenen Fußmaßes muß der Forscher den Tempel nach Baubefund in Fuß und, falls Ausführungsfehler vermutet werden, auch planmäßig (Phase 2) in Fuß erklären können. Danach kann er versuchen die erste Phase des Entwurfs zu erschließen.

5. Das Beispiel des Tempels von Segesta lehrt uns, daß axiomatische Ausgangspunkte ständig kritisch betrachtet werden müssen.

Der Tempel von Segesta ist von Mertens<sup>112</sup> äußerst sorgfältig vermessen und veröffentlicht. Es ist eine Musterpublikation geworden, in der zum Vergleich mehrere ähnliche Tempel herangezogen worden sind. De Waele<sup>113</sup> hat zwar in seiner Rezension nur die Euthynterie (oberirdische Schicht auf dem Fundament, gemessen 26.20,9/26.22,0 x 61.11,7/61.12,2 m) in Entwurfsmaßen dargelegt, doch genügt dies, da die Schwierigkeiten mit diesem Tempel gerade in dieser Schicht seinen Ursprung haben.

Mertens<sup>114</sup> Entwurfsvorgang ist vom Anfang an unscharf. Nach seiner Meinung sei der Architekt entweder von 186 x 79  $\frac{5}{7}$  (genau 7 : 3) oder von 80 x 186  $\frac{2}{3}$  Fuß (genau 3 : 7) ausgegangen, doch hat er sich schließlich dafür entschlossen den Tempel 186 x 79  $\frac{3}{4}$  Fuß (61.12,1 x 26.20,7 m) auszuführen. Trotzdem schreibt Mertens<sup>115</sup>: “Dagegen scheint der Abstand der Marken auf den Fronten mit 3.28,2-3.28,5 genau 10 pheidonischen Fuß zu entsprechen” und “Die Euthynterie dürfte demnach an den Tempelfronten an ihrer Oberkante

in 8 Einheiten zu je 10 Fuß eingeteilt, also im runden Maß von 80 Fuß geplant gewesen sein”.

De Waeles<sup>116</sup> Entwurfsvorgang ist einleuchtend: Die Euthynterie ist genau im Verhältnis 3 : 7 entworfen worden, d.h. 84 x 196 E (*‘embater’*) = 26.12,8 x 60.96,7 m. Seine Idealmaße weichen jedoch bedenklich (ca. 8 und 15 cm) vom Befund ab. Der Terminus *‘embater’* ist bei Vitruv (I 2, 4) belegt. Anders als Mertens, sind wir nicht der Meinung, daß Vitruv zu spät gelebt hat, als daß er als Zeuge für den klassischen Tempelbau dienen kann<sup>117</sup>. Da Meinungen sich unter der Last der Beweise ändern mögen, ist es nützlich de Waeles<sup>118</sup> *‘embater’* von 31,1 cm metrologisch zu untermauern. Nun ist zu bemerken, daß seine Maßeinheit nicht genau 31,1 cm ist. Die Maßeinheit ist entweder 26.12,8 : 84 = 0.31,1047... m oder 60.96,7 : 196 = 0.31,1056... m. Ausgehend von dem genormten attischen Fuß von 32,66 cm bekommen wir für den *‘embater’* 20/21 x 0.32,66 m, daß ist genau 0.31,1047... m, d.h., den erstgenannten Wert. De Waele<sup>119</sup> vermutet mit gewissem Vorbehalt, daß das Normaljoch von 14 E im Tempel von Segesta die Planungseinheit sei. Man könnte den *‘embater’* nun wohl so erklären: der Baumeister bediente sich für gewöhnlich vom attischen Fuß. Er hatte eine Vorliebe für runde Zahlen und die daktylische Einteilung der Maßeinheit. Aus diesem Grund hatte er sich für die Anwendung eines *‘embater’* entschlossen: 13  $\frac{1}{3}$  x 32,66 = 14 x 31,1047... = 435,5 cm. Diese Lösung ist für den Tempel von Segesta problematisch weil in Segesta eine ursprünglich nicht-griechische hellenisierte Bevölkerung ansässig war<sup>120</sup>.

Sowohl Mertens als de Waele sind der Meinung, daß in der Euthynterie das Verhältnis der Säulenzahl (6 x 14) widerspiegelt wurde. Dagegen ist zu bemerken, daß die Vorderfläche der Euthynterie unter einer Anschüttung unsichtbar

<sup>111</sup> 127  $\frac{11}{16}$  ist nicht die geplante Stylobatlänge (SL) des Tempels der *‘Juno Lakinia’* von Agrigent, s. Mertens 1984, 214. SB x SL = 56  $\frac{3}{4}$  x 127  $\frac{3}{4}$ ; 56  $\frac{3}{4}$  + 9  $\frac{3}{8}$  = 66  $\frac{1}{8}$  (Euthynteriebreite) und 127  $\frac{3}{4}$  + 9  $\frac{3}{8}$  = 137  $\frac{1}{8}$  = Euthynterielänge. Folglich ist die Ausladung der Stufen 2 x 3 x 1  $\frac{9}{16}$  = 9  $\frac{3}{8}$ . Sehr genau mit dem ionischen Fuß von 29,86 cm. Vgl. De Waele 1990, 257: “Keines der allgemein anerkannten Fußmaße, weder das ionisch-attische noch das dorisch-phaeidonische, lassen befriedigende Umrechnungen zu”. Meßwerte: 16.93 x 38.13 m und 19.74 x 40.94 m.

<sup>112</sup> Mertens 1984.

<sup>113</sup> De Waele 1990.

<sup>114</sup> Mertens 1984, 45.

<sup>115</sup> Mertens 1984, 44. Dazu noch S. 40: “maßgeblich ist der Saumschlag”.

<sup>116</sup> De Waele 1990, 251.

<sup>117</sup> Mertens 1984, 177, Anm. 620.

<sup>118</sup> De Waele 1990, 263.

<sup>119</sup> De Waele 1990, 251.

<sup>120</sup> De Waele 1990, 262.

Tabelle 9. Euthynteriemasse <sup>122</sup> .				
	gemessen (m)	Idealmaße	IF	Verhältnis
Segesta	26.20,9 x 61.11,7 26.22,0 x 61.12,2	26.20,2 x 61.13,8	87 3/4 x 204 3/4	1 : 2 1/3
Himera	25.09,0 x 58.61,0	25.08,2 x 58.60,0	84 x 196 1/4	1 : 2.3363
Selinunt A	18.06,3 x 42.10,9	18.06,5 x 42.10,3	60 1/2 x 141	1 : 2.3305

bleiben sollte<sup>121</sup>. Nun ist die Euthynterie tatsächlich genau im Verhältnis 3 : 7 ausgeführt. Soll das heißen, daß dieses Verhältnis im Entwurf vorgesehen wäre? Zum Vergleich werden die Euthynteriemasse zweier Tempel herangezogen, die dieselbe Disposition von 6 x 14 Säulen aufweisen und wird fortan der genormte ionische Fuß (IF) von 29,86 cm zugrundegelegt.

Die Tabelle zeigt klar, daß ein genaues Verhältnis 1 : 2 1/3 = 3 : 7 für den Entwurf der Euthynterie nicht notwendig ist. Man könnte deshalb für den Tempel von Segesta einen Ausführungsfehler vermuten und zwar an den Fronten, da Mertens mit guten Gründen schwankte zwischen 79 3/4 und 80

Fuß. Faktisch ist "79 3/4 pheidonische Fuß" ausgeführt und "80 Fuß" das mutmaßliche Entwurfsmaß. Allerdings ist mit diesen Zahlen nur ein ungefähres Verhältnis zwischen Ausführung und Entwurf der Euthynteriebreite gekennzeichnet, da das von Mertens zugrundegelegte Fußmaß nicht stimmt.

Betrachten wir anschließend die teils wiedergefundenen Nivelliermarken der Euthynterie. Die Euthynteriebreite (EB) gliedert sich in acht gleiche Längen von ca. 3.28 m und die Länge (EL) in 18 gleiche Abstände von ca. 3.40 m. So auch Mertens und de Waele<sup>123</sup>. In der Tabelle 10 sind die geplanten Längen in der jeweils vorgeschlagenen Maßeinheit (ME) aufgeführt.

Tabelle 10. Tempel von Segesta: Nivellement der Euthynterie.					
	Strecke	Länge (ME)		Nivellierabstand (ME)	
Mertens	EB	80	DF	10	DF
	EL	186	DF	10 1/3	DF
De Waele	EB	84	E	10 1/2	E
	EL	196	E	10 8/9	E
neuer Vorschlag	EB	88	IF	11	IF
	EL	204 3/4	IF	11 3/8	IF

Nur in IF sind beide Nivellierabstände gemäß der üblichen daktylischen Fußmaßeilung. Stimmt die Annahme, daß die Euthynteriebreite mit 87 3/4 IF falsch abgesteckt worden ist, muß die Planung der Langseiten (fast) genau ausgeführt sein. Im vorliegenden Fall sind die Langseiten wirklich planmäßig ausgeführt worden:

1. Die großen Abmessungen des Tempels sind gleichmäßig gestaffelt, d.h., die Länge der Euthynterie ist 204 3/4 Fuß und die Längen der 1. Stufe, der 2. Stufe und des Stylobats, sind jeweils 3 1/2 Fuß kürzer. Oder, vom Stylobat ausgehend, läßt die 2. Stufe 1 3/4 Fuß aus, usf.

2. Die doppelte Kontraktion des Säulenabstands an den Ecken ist völlig gleichmäßig vollzogen, d.h. das Zwischenjoch ist 3/8 Fuß kürzer als die neun Normaljoch und das Eckjoch ist abermals 3/8 Fuß verkürzt (Fig. 7).

Die Euthynteriebreite ist deshalb falsch abgesteckt worden: 87 3/4 statt 88 Fuß. Man hat es erst nach Vollendung der Euthynterie bemerkt, vermutlich während der Absteckung der Nivelliermarken auf der Vorderfläche der Euthynterie an der Front in Abstände von je 11 Fuß. Die Bauleitung konnte den Fehler mühelos beseitigen: statt 3 x 3 1/2 Fuß, insgesamt 10 1/2 Fuß wie an den Langseiten, wurden die Abmessungen der aufeinanderfolgenden Schichten des Stufenbaus 3 3/8, 3 7/16 und ein weiteres Mal 3 7/16 Fuß, insgesamt 10 1/4 Fuß

<sup>121</sup> Mertens 1984, 39.

<sup>122</sup> Mertens 1984, 67 (Himera, Fuß von 32.888 cm) und 82 (Tempel A in Selinunt, Fuß von 32.266 cm abgelehnt). De Waele 1990, 255 (Himera, Maßeinheit von 29,9 cm!) und 256 (Tempel A in Selinunt, Maßeinheit von 30 cm).

<sup>123</sup> Mertens 1984, 16, 34. De Waele 1990, 251-252.

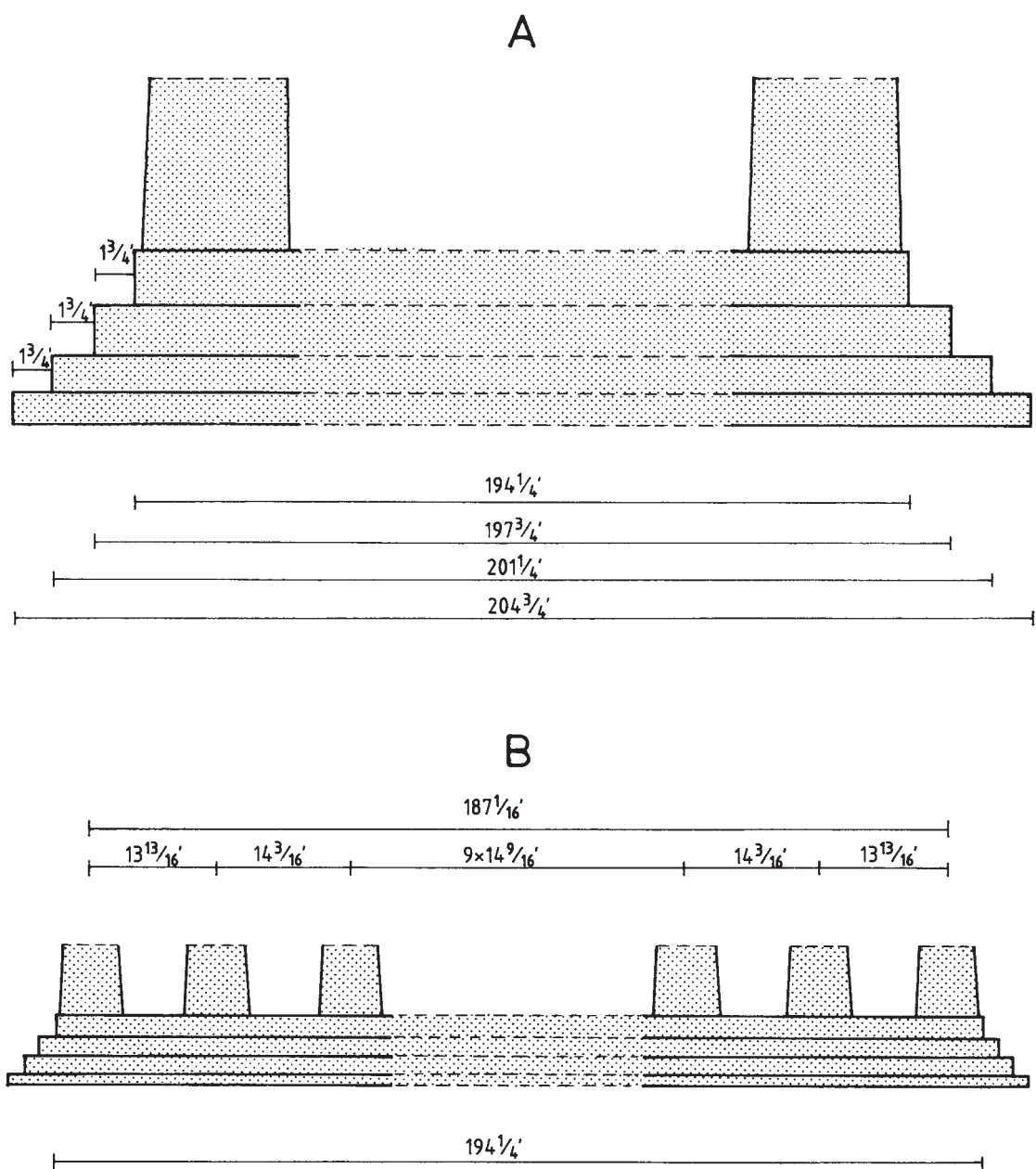


Fig. 7. Tempel von Segesta. Langseiten (ausgeführt und entworfen): A. Stufenbau. B. Stylobat und Säulenstellung.



Tabelle 11. Tempel von Segesta: Langseiten <sup>124</sup> .			
	gemessen (m)	Idealmaß	ionischer Fuß
Euthynterielänge (EL)	61.11,7; 61.12,2	61.13,8	204 $\frac{3}{4}$
Abstand der Nivelliermarken (1/18 EL)	3.40,1 i.D.	3.39,7	11 $\frac{3}{8}$
Länge der 1. Stufe	60.08,2; 60.08,3	60.09,3	201 $\frac{1}{4}$
Länge der 2. Stufe	59.04,9	59.04,8	197 $\frac{3}{4}$
Stylobatlänge (SL)	58.02,2	58.00,3	194 $\frac{1}{4}$
Eckjoch (2)	4.12,5 i.D.	4.12,4 8.24,9	13 $\frac{13}{16}$ 27 $\frac{5}{8}$
Zwischenjoch (2)	4.23,3 i.D.	4.23,6 8.47,3	14 $\frac{3}{16}$ 28 $\frac{3}{8}$
Normaljoch (9)	4.35,5 i.D.	4.34,8 39.13,5	14 $\frac{9}{16}$ 131 $\frac{1}{16}$
Summe der Joche (AWL)	55.86,4; 55.89,7	55.85,7	187 $\frac{1}{16}$
SL – AWL			7 $\frac{3}{16}$

Tabelle 12. Tempel von Segesta: Fronten <sup>126</sup> .			
	gemessen (m)	Idealmaß	ionischer Fuß
Stufenbau (ausgeführt):			
Euthynteriebreite (EB)	26.20,9; 26.22,0	26.20,2	87 $\frac{3}{4}$
Abstand der Nivelliermarken	3.28,3 i.D.	3.28,5	11
Breite der 1. Stufe	25.19,0; 25.19,1	25.19,4	84 $\frac{3}{8}$
Breite der 2. Stufe	24.16,9; 24.17,3	24.16,8	80 $\frac{15}{16}$
Stylobatbreite (SB)	23.13,0	23.14,2	77 $\frac{1}{2}$
Stufenbau (entworfen):			
Euthynteriebreite (EB)		26.27,7	88
Abstand der Nivelliermarken (1/8 EB)		3.28,5	11
Breite der 1. Stufe		25.23,2	84 $\frac{1}{2}$
Breite der 2. Stufe		24.18,7	81
Stylobatbreite (SB)		23.14,2	77 $\frac{1}{2}$
Eckjoch (2)	4.10,6 i.D.	4.10,6 8.21,2	13 $\frac{3}{4}$ 27 $\frac{1}{2}$
Zwischenjoch (2)	4.24,1 i.D.	4.23,6 8.47,3	14 $\frac{3}{16}$ 28 $\frac{3}{8}$
Mitteljoch	4.33,3 i.D.	4.34,8	14 $\frac{9}{16}$
Summe der Joche (AWF)	21.02,7; 21.03,0	21.03,3	70 $\frac{1}{16}$
SB – AWF			7 $\frac{1}{16}$

verkürzt. Folglich konnte der Stylobat planmäßig ausgeführt werden (Fig. 8). SL – AWL (Tabelle 11) = 7  $\frac{3}{16}$  Fuß und SB – AWF (Tabelle 12) = 7  $\frac{1}{16}$  Fuß. So erklärt sich, „daß die Säulen an den Langseiten .... näher an die Stylobataußenkante rücken als an den Fronten<sup>125</sup>“.

Jetzt haben wir festen Grund unter den Füßen für eine Betrachtung über die Meinungsverschiedenheiten von de Waele und Mertens<sup>127</sup>. Anschauen wir Mertens' wesentlichen Einwände zu den Entwurfshypothesen von de Waele auf seinen Wert hin. De Waele hat seinen Hypothesen unbekannte Maßeinheiten zugrundegelegt, die er Fuß nannte. Mertens<sup>128</sup> hat später seinen Entwurfsversuchen unbekannte Maßeinheiten zugrundegelegt, die er Einheit nannte. De Waele<sup>129</sup> hat die Bezeichnung Fuß jetzt durch 'embater' ersetzt. Wir können daraus folgern, daß beide Forscher gegebenenfalls Maßeinheiten von unbekannter Länge gebrauchen. Für den modernen Bauforscher ist Kenntnis der

vom Baumeister angewandten Maßeinheit eine unumgängliche Vorbedingung. De Waele<sup>130</sup> hat

<sup>124</sup> Meßwerte: Mertens 1984, 40 (Stufenbau und Nivelliermarken), 41 (Achswerte), 40, 41 und 47 (Joche).

<sup>125</sup> Mertens 1984, 49.

<sup>126</sup> Meßwerte: Mertens 1984, 40 (Stufenbau), 41 (Achswerte), 44 (Nivelliermarken), 47 (Joche).

<sup>127</sup> De Waele 1980. Mertens 1981.

<sup>128</sup> Mertens 1984, 105-106 (Agrigent, Juno Lakinia-Tempel, Fuß von 32,586 cm angenommen und verworfen, Fuß von 32,885 cm angenommen, doch gerechnet mit einer Einheit (E) von  $15/16 \times 32,885 = 30,83$  cm), 115-116 (Agrigent, Concordiatempel, Fuß von 32,885 cm angenommen, gerechnet mit E = 32,04 cm = etwa  $38/39 \times 32,885$  cm). De Waele 1990, 257 (Juno Lakinia, Einheit von 30,7 cm), 258 (Concordia, Einheit von 32,04 cm).

<sup>129</sup> De Waele 1990, 254.

<sup>130</sup> De Waele 1984, 65: „Wil men het ontwerp van de architect begrijpen, dan geldt dat men zijn maatvoering moet zien te achterhalen. Van een gebouw dat in Engelse voet is uitgezet, kan het ontwerp niet duidelijk worden, als men van een maatvoering in metermaten uitgaat“.

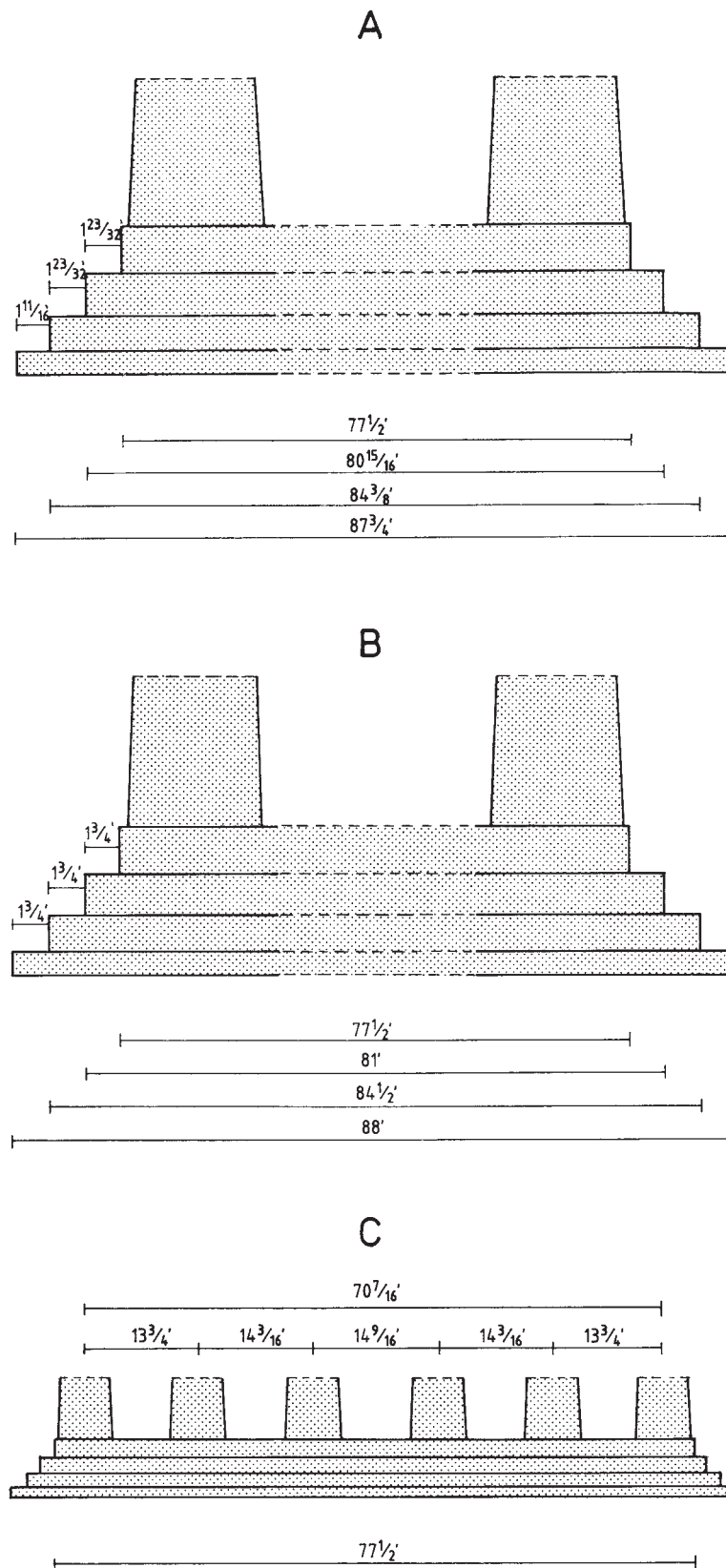


Fig. 8. Tempel von Segesta. Fronten: A. Stufenbau wie ausgeführt. B. Stufenbau wie entworfen. C. Stylobat und Säulenstellung (ausgeführt und entworfen).

schon richtig eingesehen, daß der Entwurfsvorgang unverständlich bleibt falls die falsche Einheit zugrundegelegt wird. Es läßt sich nun feststellen, daß der vorher unbekannte feste ionische Fuß von 29,86 cm den endgültigen Durchbruch zur Erschließung der zwei verschiedenen Planphasen des klassischen Tempelentwurfs zuwege bringt.

Damit kommen wir zum Hauptproblem, d.h., Mertens' Vorwurf, daß de Waeles Idealmaße der großen Abmessungen meistens beträchtlich vom Befund abweichen. Nach de Waele<sup>131</sup> müssen wir berücksichtigen, daß in klassischer Zeit weit größere Toleranzen als heutzutage zu erwarten sind. De Waele<sup>132</sup> hat jedoch jetzt zugegeben, ohne weitere Erklärung seiner ständig abweichenden Idealmaße zu geben, daß man die wesentlichen Maße der Tempel sehr genau ausgeführt hat. Zum Glück hat sich bei genauerer Untersuchung klar herausgestellt, worin die beiden Forscher grundverschieden vorgehen. De Waeles Entwurfshypothesen befolgen die Auseinandersetzungen Vitruvs<sup>133</sup>. Er gebraucht bei seinen Entwurfsanalysen genaue Proportionen um den Zusammenhang der Bauelemente zu erläutern, d.h., er hat angenommen, daß Tempelentwürfe am Reißbrett Gestalt gewonnen hätten. Eigentlich hat De Waele immerfort versucht geradewegs Phase 1 des Entwurfs zu erschließen. Mertens hat mit Recht zwei Planungsphasen angenommen, war jedoch nicht imstande Phase 1 einleuchtend zu erklären weil er ein zeichnerisches Verfahren für den antiken Tempelbau dezidiert abgelehnt hat<sup>134</sup>. Die Lösung des Problems liegt jetzt auf der Hand. Ein klarer Entwurfsvorgang ist nur zu bekommen durch die Ansichten von Mertens und de Waele zu vereinigen.

Uns will es scheinen, daß der Entwurfsvorgang<sup>135</sup> etwa folgendermaßen verlief:

*Phase 1.* Zeichnerisches Verfahren in verjüngtem Maßstab mit Hilfe eines Lineals (Vitruv I 1, 4). Folglich sind die angestrebten Proportionen genau. Vermutlich wurde immer ein wesentliches Bauelement des Tempels, oder die Distanz zwischen zwei Elemente, vom Baumeister als Ausgangspunkt angenommen und in Fuß festgelegt. Es gibt einstweilen keine hinreichenden Gründe zur Annahme, daß immer dasselbe Element gewählt worden sei. Andere, nicht weniger wichtige Elemente wurden proportional mit dem gewählten Element gekoppelt. In klassischer Zeit mußten Entwürfe von Bauten in der Volksversammlung zur Billigung vorgelegt werden. Nach der Vollendung der Phase 1 wurde der Entwurf also – eben wie heute – vom Auftraggeber auf seinen ästhetischen Wert geschätzt. Zweifelloso wurde auch der Kostenaspekt betrachtet.

*Phase 2.* Der Entwurf wurde zur Ausführung angemessen, etwa wie Lorenzen<sup>136</sup> es sich gedacht hat. Daraus resultiert die Ausführungszeichnung. Mertens<sup>137</sup> hat aus gutem Grund angenommen, daß die Kontraktion in Phase 2 zustande gebracht wurde. Falls doppelte Eckkontraktion vorgesehen wurde, differieren die Abmessungen des Stufenbaus beträchtlich von denen der ersten Planungsphase. Infolge der Abänderungen gehen die Proportionen von genau in annähernd über, wobei der ästhetische Wert des Entwurfs nicht angegriffen wurde. Es ist auch möglich, daß jetzt genaue Proportionen obwalten, wo in der ersten Phase keine ausgewogenen Proportionen existierten, z.B., die ausgeführten Stylobatmaße des Tempels A von Selinunt<sup>138</sup>.

Kommen wir nun zur Auswertung des skizzierten Entwurfsvorgangs (Fig. 9). Wie uns scheint, haben die Behörden von Segesta dem Baumeister beauftragt ein doppeltes '*Hekatompos*' – einen Tempel von 200 Fuß lang – zu entwerfen. Das Hauptmaß des Tempels von Segesta war in Planungsphase 1 die Säulenhöhe (SH) von 31 1/4 Fuß. Dieser Wert wurde in Phase 2 beibehalten<sup>139</sup>. Das zeichnerische Verfahren wurde dadurch bequemer gemacht, daß der Architekt dem Tempel eine Einheit (E) von 5/16 Fuß zugrundelegte (SH = 100 E). Es liegt nahe, daß entweder im Maßstab eins zu zehn oder eins zu hundert gezeichnet wurde. In proportionaler Abhängigkeit vom Hauptmaß sind der untere Säulendurchmesser (uD) von 20 E, das Intercolumnium (IC) von 25 E und der Abstand (A) der Ecksäule von der Stylobatkante von 1 E gewonnen worden. Der Tempel wurde ohne Berücksichtigung der Säulenstellung bei doppelter Eckkontraktion gezeichnet, d.h., all die Joche sind Normaljoche (NJ = IC + uD = 45 E). Die Achsweite der Front (AWF) und der Langseite (AWL) ergeben sich aus 5NJ bzw. 13NJ da 6 x 14 Säulen vorgesehen waren. Die

<sup>131</sup> De Waele 1984, 69.

<sup>132</sup> De Waele 1990, 252.

<sup>133</sup> De Waele 1984, 71-72.

<sup>134</sup> Mertens 1984, 50.

<sup>135</sup> Der von Vitruv (IV 3, 3-4) überlieferte Tempelentwurf in der dorischen Version ist weit vom griechischen Originalentwurf entfernt.

<sup>136</sup> Lorenzen 1966, 9: "as a practising architect, one is faced with the problem of co-ordinating the work or opinions of many specialists in the building field, specialists on many different subjects ranging from science to craftsmanship. Each of these specialists would be justified in regarding the architect as an amateur of his subject. The sole function of the architect is to co-ordinate in order to reach a practical solution".

<sup>137</sup> Mertens 1984, 45.

<sup>138</sup> Mertens 1984, 82; De Waele 1990, 256. Gemessen 16.13,3 x 40.31,0 m, Idealmaße 16.12,4 x 40.31,1 m = 54 x 135 IF, also genau 2 : 5.



Tabelle 13. Tempel von Segesta: Entwurfsphase 1 des Grundrisses.					
	Verhältnis	ionischer Fuß		E	
SH : uD	5 : 1	31 $\frac{1}{4}$	6 $\frac{1}{4}$	100	20
SH : IC	4 : 1		7 $\frac{13}{16}$		25
SH : A	100 : 1		$\frac{5}{16}$		1
SH : NJ	20 : 9		14 $\frac{1}{16}$		45
SH : AWF	4 : 9		70 $\frac{5}{16}$		225
uD : NJ	4 : 9				
uD : IC	4 : 5				
AWF : AWL	5 : 13		182 $\frac{13}{16}$		585
SB SL		77 $\frac{3}{16}$	189 $\frac{11}{16}$	247	607
St2B St2L		80 $\frac{5}{8}$	193 $\frac{1}{8}$	258	618
St1B St1L		84 $\frac{1}{16}$	196 $\frac{9}{16}$	269	629
EB : EL	7 : 16	87 $\frac{1}{2}$	200	280	640

Stylobatmaße (SB, SL) sind durch addieren (AW + uD + 2A) entstanden, die 2 Stufen (St2, St1) und die Euthynterie (E) durch allseitige Ausdehnung des Stylobats mit jeweils 1  $\frac{23}{32}$  Fuß (5.5 E), was eine Euthynterielänge von genau 200 Fuß zur Folge hat. Es fällt auf, daß an den Maßen des Stufenbaus für die Planung keine wesentliche Bedeutung zuzuschreiben ist. Die Länge von 200 Fuß gibt anscheinend nur ein Indiz für den Baukostenanschlag (Vitruv I 1, 4).

Entwurfsphase 1 differiert beträchtlich vom Befund. Wir müssen deshalb versuchen die Abänderungen zu erklären. Der uD von 20 E ist in Entwurfsphase 2 – auf Anraten des Gutachters in der Festigkeitslehre (?) – erweitert worden bis 21 E. Das Normaljoch ist in Phase 2 ein halber Fuß vergrößert worden, wodurch am wichtigsten Intercolumnium (Langseiten: Normaljoch – uD und Fronten: Mitteljoch – uD) genau 8 (14  $\frac{9}{16}$  – 6  $\frac{9}{16}$ ) Fuß zugeteilt wurde<sup>140</sup>. Die gleichmäßige Kontraktion ist in Phase 2 geplant worden (*Tabelle 11*): die Achsweite der Langseiten (AWL) = 9 x 14  $\frac{9}{16}$  + 2 x 14  $\frac{3}{16}$  + 2 x 13  $\frac{13}{16}$  = 187  $\frac{1}{16}$  Fuß. Die ausgeführte Stylobatlänge wurde deshalb AWL + uD + 2A = 187  $\frac{1}{16}$  + 6  $\frac{9}{16}$  + 2 x  $\frac{5}{16}$  = 194  $\frac{1}{4}$  Fuß. Statt 1  $\frac{23}{32}$  Fuß laden die Stufen und die Euthynterie in Phase 2 jeweils 1  $\frac{3}{4}$  Fuß aus. Warum an den Fronten nicht die gleiche Kontraktion – d.h. Eckjoch von 13  $\frac{13}{16}$  statt 13  $\frac{3}{4}$  Fuß – wie an den Langseiten entworfen worden ist, bleibt unklar. Die reguläre Phase 2 des Entwurfs der Fronten hätte folgendermaßen verlaufen müssen: Achsweite (AWF) = Mitteljoch + 2 Zwischenjoch + 2 Eckjoch = 14  $\frac{9}{16}$  + 2 x 14  $\frac{3}{16}$  + 2 x 13  $\frac{13}{16}$  = 70  $\frac{9}{16}$  Fuß. Die Stylobatbreite (SB) = AWF + uD + 2A = 70  $\frac{9}{16}$  + 6  $\frac{9}{16}$  + 2 x  $\frac{5}{16}$  = 77  $\frac{3}{4}$  Fuß. Die Euthynteriebreite = SB + 3 x 3  $\frac{1}{2}$  Fuß = 88  $\frac{1}{4}$  Fuß<sup>141</sup>.

Die Erörterung des Aufrisses bis ins Detail wird dem Fachmann überlassen. Es sei nur erwähnt, daß die Fußmaßeilung bis  $\frac{1}{32}$  jetzt gesichert ist, weil die Architravhöhe + Triglyphenhöhe zur Tympanonhöhe genau im Verhältnis 5 : 4 steht<sup>142</sup>.

Selbstverständlich ist in Segesta in klassischer Zeit nur das Fußmaß von 29,86 cm angewendet worden. Zum Beweis für die Richtigkeit unserer Behauptung genügt es De Waele<sup>143</sup> zu zitieren: “In der Contrada Mango in Segesta wurden die Reste eines großen Temenos ausgegraben, in dem ein frühklassischer Tempel gelegen hat. Nur verschiedene Kapitelle von Ring- und Vorhalle sind erhalten geblieben, während die übrigen Bauteile infolge vom üblichen Steinraub verschwunden sind. Die von Mertens nach Metermaßen ermittelten Proportionen des Ringhallenkapitells sind auf eine Maßeinheit (1 ME = 29,9 cm) gegründet”. Mertens hat keine antike Maßeinheit vorgeschlagen.

<sup>139</sup> Mertens 1984, 42. Säulenhöhe i.D. 9.33,8 m, Idealmaß 9.33,1 m = 31  $\frac{1}{4}$  IF.

<sup>140</sup> Mertens 1984, 41. Der untere Säulendurchmesser (uD) ist 1.93,5-1.97,3 m, durchschnittlich 1.95,4 m. Idealmaß 1.96,0 m = 6  $\frac{9}{16}$  IF = 21 E. Normaljoch und Mitteljoch: s. die *Tabellen 11 und 12*.

<sup>141</sup> Vielleicht ist es nützlich zu bemerken, daß das Triglyphon des Tempels sehr ungewöhnlich ausgeführt ist: Mertens 1984, 48, 153; De Waele 1990, 253, 259.

<sup>142</sup> Mertens 1984, 42, 211. Architravhöhe 1.44,3-1.45,7 m, i.D. 1.45,0 m. Triglyphenhöhe 1.44,0-1.45,4 m, i.D. 1.44,8 m. Tympanonhöhe 2.31,4 m, Idealmaß gleichfalls 2.31,4 m = 7  $\frac{3}{4}$  IF. 7  $\frac{3}{4}$  x  $\frac{5}{4}$  : 2 = 4  $\frac{27}{32}$  IF = 1.44,6 m = 15  $\frac{1}{2}$  E. Ausgeführt entweder 4  $\frac{27}{32}$  oder 4  $\frac{7}{8}$  Fuß (1.45,6 m). Die Teilung bis  $\frac{1}{32}$  wird bestätigt am Tempel A in Selinunt (Mertens 1984, 83). Die Achsweite der Langseiten des Tempels A ist 38.73,6 m. Das Idealmaß ist nicht 38.74,3 m (129  $\frac{3}{4}$  IF), sondern 38.73,4 m (129  $\frac{23}{32}$  IF). Es gibt 2 Eckjoch und 11 Normaljoch. Die Eckjoch (gemessen 2.89,8 m, Idealmaß 2.89,3 m = 9  $\frac{11}{16}$  IF) sind zusammen 19  $\frac{3}{8}$  IF. Das Normaljoch ist deshalb (129  $\frac{23}{32}$  – 19  $\frac{3}{8}$ ) : 11 = 10  $\frac{1}{32}$  IF = 2.99,5 m (gemessen 2.99,5 m). Tempel A ist fast “millimetergenau” erbaut worden, s. Anm. 138 und *Tabelle 9*.

<sup>143</sup> De Waele 1990, 257. Mertens 1984, 87.



## VERGLEICHENDE METROLOGIE

Die vergleichende Metrologie stützt sich auf die Voraussetzung, daß jederzeit genormte Fußmaße existiert haben. In der Annahme, es sei wirklich so, kann man versuchen frühmittelalterliche Fußmaße zu gewinnen und die Länge des römischen Fußes möglichst genau zu bestimmen. Unter Benützung zuverlässiger Quellen des 17. Jahrhunderts, konnte der französische Forscher Guilhiermoz<sup>144</sup> den Nachweis liefern, daß der französische Fuß vor dem Jahre 1668 etwas größer war als im Jahre 1799, beim Übergang zum metrischen System: Pied de roi (1799) von 32,4839 cm x 3161/3144 = Pied de roi (1667) von 32,6595 cm. Es fällt sofort auf, daß die Längen des älteren französischen Fußes und des attischen Fußes übereinstimmen. An die Tatsache schließt Guilhiermoz die Hypothese an, daß eine Rute von 18 französischen Fuß ursprünglich in 20 römischen Fuß unterteilt sei und er ermittelt so den römischen Fuß von 29,3936 cm. Mit diesem Ergebnis war er seiner Zeit weit voraus, weil damals der römische Fuß allgemein mit ca. 29,6 cm bewertet wurde. Der Beweis, der ältere 'pied de roi' sei wirklich den unmittelbaren Nachfolger des römischen Fußes, steht noch aus<sup>145</sup>. Um den englischen Fuß ist es besser bestellt. Es ist nachzuweisen, daß der (kürzere)<sup>146</sup> angelsächsische Fuß sowohl zum römischen Fuß als zum englischen in einfachem Verhältnis steht. Die schriftlichen Quellen für die metrische Bewertung des angelsächsischen Fußes sind seit langem bekannt, aber, ähnlich die Stelle Herodot II 168, ist die ausschlaggebende Quelle irrig verwertet worden. Dieses Thema zu erörtern, erfordert jedoch eine gesonderte Behandlung.

## NACHTRAG

Der Parthenon in Athen. Das ionische Fußmaß von 29,86 cm ist auch im klassischen Athen verwendet worden. Meter-Maße (eingeklammert) nach Bankel 1983, 87. Abkürzungen wie in *Tabelle 8*. Kommt hinzu: die Säulenhöhe (SH) und die Gebalkhöhe (GH) der Front.

J (4.29,4); 4.29,2 m =  $14 \frac{3}{8}$ ,  
 JE (3.69,1); 3.69,5 m =  $12 \frac{3}{8}$ ,  
 E (1.02,0); 1.02,6 m =  $3 \frac{7}{16}$ ,  
 SB (30.89,2); 30.90,5 m =  $103 \frac{1}{2}$ ,  
 SB = 5J + 2JE + 2E  
 SL (69.53,9); 69.53,6 m =  $232 \frac{7}{8}$ ,  
 SL = 14J + 2JE + 2E

uD (1.90,5); 1.90,4 m =  $6 \frac{3}{8}$ ,  
 IC (2.38,9); 2.38,9 m = 8',  
 IC = J – uD  
 SB : SL = 4 : 9  
 J : (JE + E) = 10 : 11  
 SH (10.43,0); 10.45,1 m = 35',  
 GH (3.28,8); 3.28,5 m = 11',  
 SB : (SH + GH) = 9 : 4  
 Zusammenhang der wichtigsten Bauelemente:  
 (SH + GH) : SB : SL = 1 :  $2 \frac{1}{4}$  :  $2 \frac{1}{4} \times 2 \frac{1}{4}$

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<sup>144</sup> Guilhiermoz 1913, 272-277 und 283.

<sup>145</sup> Die Abmessungen des Freiburger Münsterturmes (ca. 1295) sind mit dem Fußmaß von 32,66 cm sehr genau zu erklären. Hecht (1972, 110) hat einen Fuß von 31,095 cm (nahezu 20/21 x 32,66, wie de Waele für den Tempel von Segesta) angenommen. Nach Hecht (Abb. 85, Aufriß) stehen zwei wesentliche Baumaße (hier A und B) in Fuß im Verhältnis  $48 \frac{1}{2} : 69 \frac{3}{4}$ , = 0.6953. Die Meßwerte sind 15.13 m (A) und 21.63,5 m (B = 3.10 + 0.83,5 + 1.33 + 11.09 + 1.33 + 0.85 + 3.10 m). A : B = 15.13 : 21.63,5 = 0.6993 oder nahezu 7 : 10, wie entworfen. Dieses Verhältnis stimmt tatsächlich mit dem Fuß von 32,66 cm, denn  $46 \frac{3}{8} : 66 \frac{1}{4} = 7 : 10$ .

<sup>146</sup> Der sogenannte 'Great Northern Foot' von ca. 33,3 cm hat nie existiert und der pes drusianus von ca. 33,07 cm ist in England in römischer Zeit nicht zweifelsfrei nachzuweisen. Die Längen von 5 römischen Fußmaßstäben aus London sind 29,2 cm (British Museum), 29,2/29,4/29,4 cm (Guildhall Museum) und 29,4 cm (London Museum). Grierson (1972) hat den angelsächsischen Fuß mit ca. 10 Inches ziemlich genau bewertet.



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BULKSTRAAT 8  
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# The Salento Isthmus Project

## Second Interim Report

Gert-Jan Burgers

### INTRODUCTION

In recent years Southern Italy has witnessed an upsurge of archaeological research on integration processes in antiquity. Both hellenisation and romanisation of the local Italic societies have become major research themes. Although many of the approaches involved have adopted greco- and romano-centric perspectives respectively, they have brought about some dawning contours on the material culture of the Italic societies. Gradually, however, the awareness is growing that, if we are to understand the character and consequences of the interactions between Greeks and Romans on the one hand and the local communities on the other, these contours have to be refined and attention has to be paid to socio-political and economic organisation (see in particular Lombardo 1984; 1993; Whitehouse and Wilkins 1989).

Unfortunately, such research is still hindered by a lack of problem-oriented settlement studies. Thus, evaluating recent studies on the South-Italian hillfort phenomenon, Gualtieri (1987) concluded that these are all too often limited to aspects of the defences of the sites. He argued for a different approach, demonstrating the analytical power of questions on the spatial organisation of individual hillforts. Such questions, he correctly added, need to be asked within a regional framework, so as to enable a consideration of variability among settlement forms and the factors which determined them (cf. D'Andria 1993 on the Salento peninsula in particular).

The present project seeks to elaborate such an approach. Its aim is to study the development of settlement diversity and hierarchy on the Salento isthmus from the beginnings of Greek colonization of Southern Italy until the Augustan administrative reorganisation of Italy<sup>1</sup>.

Datasets are relatively abundant in this part of the Italian heel. Thanks to a long standing tradition of archaeological fieldwork, above all by the University of Lecce and the Soprintendenza Archeologica della Puglia<sup>2</sup>. Furthermore, from 1981 onwards the Archaeological Institute of the Vrije Universiteit of Amsterdam (AIVU) has developed a research programme which, besides excavation, entails the systematic exploration of large areas of the Brindisi-district by means of

intensive, total coverage survey (Boersma 1990; Yntema 1993). As with most Mediterranean surveys, however, the latter has aimed mainly at the interpretation of the character and distribution of minor rural settlements. Although some of the more complex sites have recently witnessed small-scale excavations, the majority of them still constitute a *terra incognita*, except for some sporadic reports on incidental finds. This holds good for open as well as defended sites. Since these major settlements form a crucial factor for any understanding of settlement hierarchies and related phenomena (Cf. Bintliff and Snodgrass 1988, 69; Patterson 1991, 148), they constitute the focus of the present project. Thus we have decided to compare the already existing settlement data with four complex sites which are incorporated within the regional survey project. These sites were selected on the basis of: 1. indications for substantial occupation; 2. the presence/absence of fortifications (two each); 3. differences in size; 4. accessibility for survey. Central questions concern their chronology, size, location, form, occupational density and character. The answers to such questions, of course, cannot be thought to be directly reflected in the archaeo-

Correction English text: Free University Language Centre, Amsterdam; drawings: H.J.M. Burgers, fig. 7 by R. Meyers and G. v. Haaff.

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<sup>1</sup> As part of the larger research programme of the Archaeological Institute of the Free University of Amsterdam, the project has been incorporated into the Progetto Strategico no. 251100 of the Italian Consiglio Nazionale delle Ricerche, directed by the Archaeological Department of the University of Lecce. Erroneously, in the first interim report (Burgers 1992) acknowledgments have been omitted. As yet we wish to express respect and gratitude to our colleagues at Lecce, and especially to prof. F. D'Andria, who most generously provided us with hospitality, facilities and precious insights, without which the present study could not have been accomplished. Furthermore, we are grateful for the ready cooperation of the Soprintendenza Archeologica della Puglia. Funds were granted by the Italian Ministry of Foreign Affairs and the Dutch Institute at Rome.

<sup>2</sup> Reports on, and references to archaeological fieldwork on the Salento Isthmus have been published in, among others, D'Andria 1990-b, Quilici 1975, and the annual Taras, *Notiziario delle attività di tutela della Soprintendenza Archeologica della Puglia*.

logical debris, certainly not where surface material of such highly complicated sites is concerned. They have to ripen through various levels of interpretation, the first being that of recording the debris. Therefore, in order to maximize the possibility of control on conclusions we have developed a survey method which minimizes this first level of on-site interpretation. For the detailed presentation of the method we refer to the first interim report (Burgers 1992); in short, documentation is centred not on individual scatters, but on relative artefact density, and it is carried out within a predesigned grid. This method offers the opportunity to consider the above-mentioned questions through an assessment of the spatial patterns of the various artefact classes. Furthermore, these patterns can be incorporated within the study of site formation, which includes a detailed physical-geographical investigation of post-depositional processes.

#### THE SITE OF 'MURO TENENTE'

In the first preliminary report the 1991-campaigns focussing on the sites of 'Muro Maurizio' and 'Li Castelli' were presented. Now attention is paid to the site of Muro Tenente, which was investigated in the summer of 1992 (*Fig. 1*)<sup>3</sup>. This site is situated in open countryside between the modern villages of Latiano and Mesagne and some 18 km southwest of Brindisi, capital city of the province of the same name. Its most conspicuous features in the field as well as on aerial photographs are the c. 2,7 km long defensive walls, enclosing an area of some 50 ha<sup>4</sup>. The site derives its name from these defences; from medieval times onwards the local people have called it alternately Paretone/Paretalto (large wall) and Muro<sup>5</sup>.

As with most of the Brindisi district the area is characterised by a gently undulating terrain. The hills of the so-called Murge start at a distance of about 20 km to the southwest (Murge Tarantine) and only some 5 km northwest of the site (Murge Baresi). In contrast to these dolomitic limestone hills, the pleistocene and pliocene sands of the Brindisi plain offer a fertile base for agriculture. Within this plain several other defended ancient sites are known besides Muro Tenente. On the basis of similarities in material culture, all of these have been identified and referred to as indigenous Iapygian/Messapian, in contrast to Greek settlement in Salento. The latter, on current consensus, was restricted to the territory of the Greek town of *Taras* (Taranto), comprising the larger part of the plains west of the Tarentine Murge.

Incidental finds and some small scale excavations carried out by the Soprintendenza proved that the site of Muro Tenente actually was inhabited on a permanent basis and did not serve as a mere fortified refuge for a dispersed living population; besides a relatively large number of tombs, a street and remains of late Iron Age dwellings and of potters' kilns were uncovered (Andreassi 1981). Unfortunately, thus far no detailed information has been published. If the evidence for pre-Roman settlement is scanty, we know even less about its fate after the Roman conquest in the 3rd century B.C. Thus, it is only on the basis of written evidence that it has been identified as the Roman roadstation of *Scamnum* (Uggeri 1983). Furthermore, it is thought to have been incorporated into the territory of the Roman *municipium Brundisium* (Marangio 1975).

#### RESULTS OF THE FIELD SURVEY

Considering the overall distribution and density of artefacts as documented by the survey, one may safely conclude that the site investigated is indeed one characterised by intensive past human occupation (*Fig. 2*). The method of documentation employed permits us, moreover, to show that the degree of shifting of location was rather limited; most artefacts are concentrated within the once fortified area. In this respect, the latter sharply contrasts with the surrounding countryside, where we encountered only few distinct scatters of limited extension, marked off from an otherwise discontinuous low density spread.

Whereas the area was approached as a spatial and temporal continuum at the level of recording, at a second level of interpretation this continuum has been broken down in order to discover contemporary spatial patterns. In the following we will present a summary of our preliminary findings based on these patterns. Although the artefacts documented represent human activities dating from mesolithic times until the present, in the context of our main objectives, attention will be focussed here on the timespan from the Iron Age until the early Roman period.

<sup>3</sup> We sincerely thank the comune of Mesagne, Province of Brindisi, for the hospitality and cooperation provided to us during the fieldwork. Special regards go to prof. A. Nitti, Honorary Inspector of the Soprintendenza Archeologica della Puglia.

<sup>4</sup> On the basis of the size of the defended area, Muro Tenente can be placed in a middle category of a hierarchy of fortified sites in Salento. Cf. D'Andria 1993, 447.

<sup>5</sup> A.P. Coco, *La foresta oritana e i suoi antichi casali*, Lecce 1919, 19. The adjective Tenente refers to the name of a local family owning land and a farm of the same name in the area.



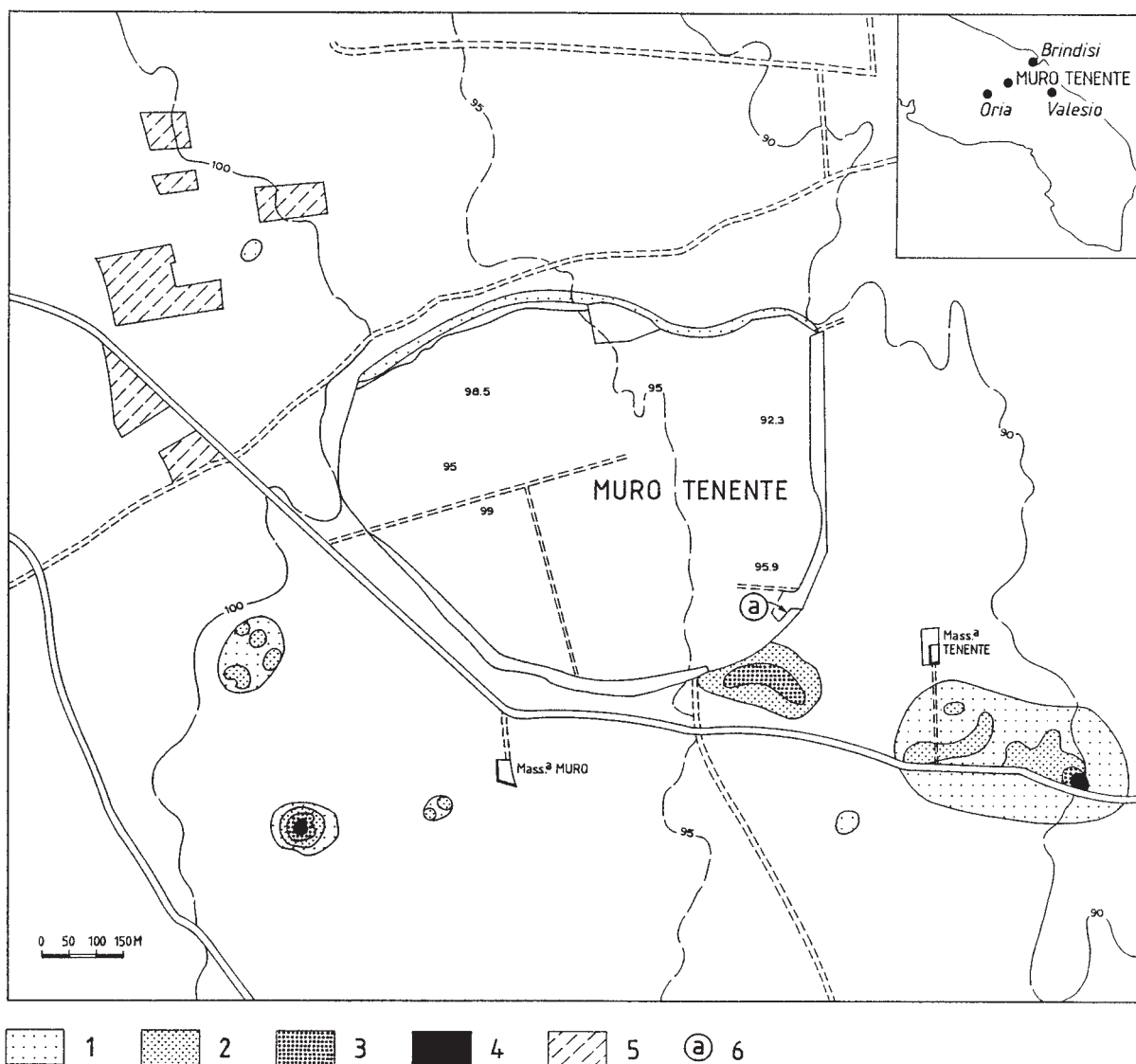


Fig. 1. Muro Tenente and surroundings. Total artefact density outside the defences, 1:  $> 2$  per  $m^2$ ; 2:  $> 5$  per  $m^2$ ; 3:  $> 10$  per  $m^2$ ; 4:  $> 15$  per  $m^2$ ; 5: areas not surveyed; 6: drawn section of defences, cf. Fig. 7.

### The early Iron Age

The main nucleus of early Iron Age occupation can be identified by focussing in particular on the find-spots of the locally produced fineware, called matt-painted pottery (Fig. 3). Here we found it in relation to contemporary coarse wares. However, these latter impasto wares are distributed more widely than the matt-painted fragments. This suggests a much larger occupied area for the early Iron Age, if one were to adhere to the traditional dating of this type of impasto to that phase. Recently, however,

the chronological diagnosticity of these wares has been decreased by stratigraphical contexts (Boersma et al. 1991, 118/9). From this it emerges that fabrics as well as various forms remained much the same for as long as the early Hellenistic period. Although the later vessels appear wheelmade and the earlier ones handmade, such a distinction cannot be made for most of the very fragmentary and worn specimens found in the field. For the moment therefore the early Iron Age occupation of Muro Tenente is thought to be restricted to the 3 ha. large



Fig. 2. Muro Tenente. Contour map of total artefact density, 1: > 5 artefacts per  $m^2$ ; 2: > 10 artefacts per  $m^2$ ; 3: > 15 artefacts per  $m^2$ ; 4: > 20 artefacts per  $m^2$ ; 5: > 30 artefacts per  $m^2$ ; 6: > 40 artefacts per  $m^2$ ; 7: areas not (yet) surveyed.

area where the impasto wares are found in association with matt-painted pottery. On one occasion, however, we are inclined to posit early Iron Age occupation mainly on the evidence of impasto. But one matt-painted fragment was found at this spot, which lies just northwest of the main site (fig. 1). It is the only site of those found outside the walled area where tiles were absent, which indeed coincides with the evidence of excavated early Iron Age huts elsewhere in Salento. Furthermore, very close parallels to this small site were discovered by field survey in the vicinity of Oria, suggesting that such isolated occupation might have been more frequent in early Iron Age Salento (Yntema 1993, scatters 7-1 and 13-7).

#### *The Archaic and Classical periods*

Contrary to this small site, the main nucleus of early Iron Age settlement does show continuity of occupation in the following centuries. In fact, in the Archaic and Classical periods here settlement seems to have stabilised: studying the distribution

of ceramic fragments from these phases (notably of 'Ionic cups', Greek and local banded wares, Corinthian amphorae and Attic Black and Red figured pottery), significant changes can be detected neither in extent, nor in location. We have to consider, however, the possibility that there do exist other archaic/classical habitation zones in the area, which, due to limits in our ceramic knowledge, we might not have been able to recognize. It is above all the research of local fine and coarse wares of the classical period which is underdeveloped. This is, among other things, due to the fact that South-Italian archaeology traditionally has focussed on cemeteries, of which, moreover, Greek and Greek inspired ceramics have received all scholarly attention. As a consequence, especially for the 5th and largest part of the 4th century B.C., our ceramic evidence consists mainly of funerary pottery. Nevertheless, the patterning of the funerary wares at Muro Tenente reflects the generally observed custom of native communities to bury their dead



Fig. 3. Muro Tenente. Density per quadrat of early Iron Age matt-painted ceramics (solid circles) and impasto pottery (open circles).

around and within the residential areas. Since it is largely confined to the central nucleus which was already occupied during the previous period, it is plausible to assume that continuity was strong.

#### *The early/middle Hellenistic period*

Tiles make up the largest part of the surface debris at Muro Tenente. Unfortunately we still are unable to date them closely. However, statistics do show that the artefact classes which are most commonly associated with the vast concentrations of tiles, are invariably of Hellenistic date: besides coarse kitchen, plain, banded and other less frequent wares of this phase, it is above all the distribution of the Apulian BlackGloss pottery which coincides with that of the tiles (Fig. 4). Furthermore, the patterning of the latter two contrasts strikingly with that of ceramics from earlier as well as later phases. Now, although we are not able to say whether the settlement was already made up of tile covered houses in previous phases, we may deduce from these observations that it did in the Hellenistic

period and that it was enlarged drastically in this phase.

A further indication for this increase is the striking diffusion of loomweights, grinding and millstones, amphorae, pithoi and other utilitarian wares all over and in between these concentrations of tiles and Hellenistic ceramics. This dispersion, moreover, carries other information on the spatial organisation of the settlement. It strongly suggests that neither crafts nor activities relating to the processing and storage of agricultural produce were concentrated in specific quarters of the settlement. In contrast, it seems more probable that they were organised at the household level. In this connection it should also be mentioned that the irregular distribution of the main artefactual concentrations points to a similar lack of central organisation in the internal lay-out of the new settlement. This last point is reinforced by the observation that the nucleus occupied in the previous centuries constitutes the centre of the early Hellenistic occupied area, suggesting that from here a gradual centrifugal expansion of habitation took place into vari-





Fig. 4. Muro Tenente. Density per quadrat of Apulian Black Gloss ceramics.

ous directions. This points to an organic growth of the settlement.

It is less clear, however, whether we are dealing with an agglomerate settlement or whether the new clusters of dwellings were separated from each other. If one were to rely on the survey evidence only, the second option seems the more likely. The major clusters which are thought to have been erected in this early Hellenistic period we find south, north-west and east of the central area (which now has been considerably enlarged though). These areas are separated by zones in which we documented relatively few artefacts of any kind. Such empty zones may have been used for intensive agriculture or for other purposes (see below). However, we still await the results of the physical-geographical research to assess if these zones constitute 'blind' areas, where material was eroded away or covered by accumulative layers. On the other hand, we have documented various other zones, which, although they did not show apparent evidence for dwellings, do demonstrate scatters with other artefacts, notably with funerary and storage wares respectively. Indeed these zones probably served different functions (necropoleis; storage).

There were other transformations in the spatial organisation of the locality investigated at the end of the 4th century. Whereas for the preceding two centuries the data lead us to conclude that the people all clustered exclusively in the previously mentioned settlement, for the start of the Hellenistic period the surrounding area was no longer completely void of traces of habitation. Several isolated scatters have been delineated (*Fig. 1*), invariably containing artefacts which find direct parallels in the habitation units of the main settlement: Apulian Black Gloss, plain and coarse kitchen wares, loomweights and tiles. Although at some of these scatters the more abundant presence of later materials tended to obscure the early Hellenistic occupation, the method of survey we employed again showed its effectiveness in clarifying the phases of expansion and contraction of such multi-period sites. Thus early Hellenistic occupation proved to be of minor extent (c. 500 m<sup>2</sup> on average). Occasionally fragments of funerary wares were also found at or in close proximity to these sites. Echoes of these we find in past reports about incidental discoveries of small isolated necropoleis. On the basis of this combined evidence we may safely conclude that in this respect

Muro Tenente does follow the general trend as documented by the regional surveys: clearly a segment of the community now had taken permanent residence in isolated homesteads at a distance from the major settlement. The same pattern may be observed at Muro Maurizio (cf. Burgers 1992).

In conclusion, in the early Hellenistic period the small hamlet of Muro Tenente grew into a substantial settlement of a nucleated kind. Contemporaneously, and again in contrast with the preceding phases, its countryside crowded with dispersed and isolated farms. As has been recognised by Garnsey (1979), such a pattern of combined nucleated and dispersed settlements is found in both urbanised and underurbanised regions in pre- and early Roman Italy. Drawing on this, Garnsey warns against using the concept of the modern Southern Italian agrotown and related socio-economic phenomena as comparative evidence for the agrarian history of ancient Southern Italy. The slowly increasing body of archaeological data is now demonstrating that in much of ancient Southern Italy peasants had a rural base. They did not live exclusively in nucleated settlements, as is the case with the agrotowns, from which one left on a daily basis to work the scattered lands and „the essential feature of which is the separation and alienation of the peasantry from the land” (Garnsey 1979, 19).

#### *The late Republican period*

The regional surveys have demonstrated that a considerable part of the isolated farmsites showed continuity in the 2nd and 1st centuries B.C. As a matter of fact, those that did invariably were enlarged in this late Republican phase. We may observe the same pattern in the countryside around Muro Tenente. In contrast, the main settlement shows all traces of a dramatic decrease of the inhabited area in this phase (*Fig. 5*)<sup>6</sup>. Artefacts of this phase abound above all in the centre of the old settlement. Immediately around this central area we find a halo of late Republican pottery. However, because of its low density most of this spread may be classed as back-ground noise for which distribution several factors might account, notably ancient manuring practices. At a small number of spots north of the central area, on the other hand, the density of the scatters is such as to consider a different explanation. In fact, if we take into account the overall find context, it will be noticed that these scatters are found in the midst of large concentrations of household debris of the previous period (cf. *Fig. 4*). It is fairly reasonable, therefore, to propose continuity of occupation on these spots. Furthermore, the circumstance that these scatters contain relatively large amounts of fine wares fa-

vours an interpretation as dwellings instead of mere utilitarian outbuildings of the main nucleus of habitation. Thus, for the late Republican period an overall picture emerges of a settlement made up of a central unit, surrounded by four to five slightly outlying clusters of dwellings, and a series of farmsteads at varying distances.

#### *The Imperial period*

Again we find a completely different settlement pattern in the 1st century A.D. Within the walled area, artefacts from this phase have been recorded only at one clearly identifiable spot in the centre (*Fig. 6*). It is roughly equal in size (c. 0,5 ha.) to contemporaneous sites outside the defences. Whereas the extent of the latter increased in the 2nd century A.D., the fortified area revealed virtually no material dating to this century, nor to later Imperial phases. However, since this area has not yet been explored completely, it is too early to suggest that it was abandoned at the end of the first century A.D. as was the case with Li Castelli di San Pancrazio (Cf. Burgers 1992, 116).

#### THE DEFENCES

At present the course of the fortifications can be established almost entirely, except for some sporadic zones where they were razed. Almost all along this course they are covered by a heap of earth and stones, which reaches a width of 10-15 m. and a height of 2-3 m. on average. The circuit was mapped by the regional Soprintendenza. Unfortunately, however, no detailed research has yet been carried out. By carefully surveying the walls we discovered a tract at its south-east side where we were able to document its inner facing for a length of 10 m. (*Fig. 7*), the outer facing being covered completely by earth though. The inner facing strongly resembles that of the walls of the nearby fortified settlement of Valesio, which recently have been carefully studied (Boersma et al. 1991). Both are made up of stoneblocks of various shapes and proportions. Their rather irregular appearance contrasts with the more embellished aspect of the outer facing of the Valesio walls, which obviously was meant to impress outsiders. The Valesio walls have been dated on the basis of ceramic evidence to the end of the 4th/early 3rd century B.C. To date the walls of Muro Tenente, let alone to establish if they were built in one operation — as has been

<sup>6</sup> A much more dramatic decrease was recognised for the nearby fortified centre of Muro Maurizio. Cf. Burgers 1992, 114-116.



Fig. 5. Muro Tenente. Density per quadrat of early Roman ceramics

concluded for those of Valesio — there are still no other than these comparative data available. Nevertheless, we may conclude that at no time was the walled area completely inhabited. As was stated above, various non-residential zones may be assumed on the basis of the absence of clearly residential debris. These zones may have been used for necropoleis, storage facilities or agriculture. Furthermore, since we have evidence that part of the population actually lived in dispersed farms out in the countryside, it is not too hazardous to envisage these people, including their livestock, crowding within the walls of the major settlement in times of danger.

#### CONCLUDING REMARKS

From the above it emerges that intensive field surveys have the potential of revealing general trends in the occupational history of even large, multi-period sites. The survey results show that from the early Iron Age the area served a small settlement,

which was not enlarged significantly until the late 4th century BC. By this early Hellenistic period, however, the site expanded considerably and a segment of the population moved to live in farmsteads dispersed over the surrounding countryside. Thus, a completely different local settlement pattern came into being, in which one may recognize a hierarchical organization. Again in the centuries following on from the Roman conquest of Salento, the landscape changed in appearance. Although people continued to live in dispersed farmsteads from at least the augustan period onwards, one can no longer envisage the walled area as the major settlement on which they were dependent.

This striking diachronic variability in settlement patterns makes it abundantly clear that propositions concerning the variables which determined them cannot be sufficiently validated by stressing environmental conditions of the area only. Admittedly, under specific circumstances certain environmental factors may have had a decisive influence on the settlement form. It is, in fact, one of the aims of the physical-geographical research to establish such



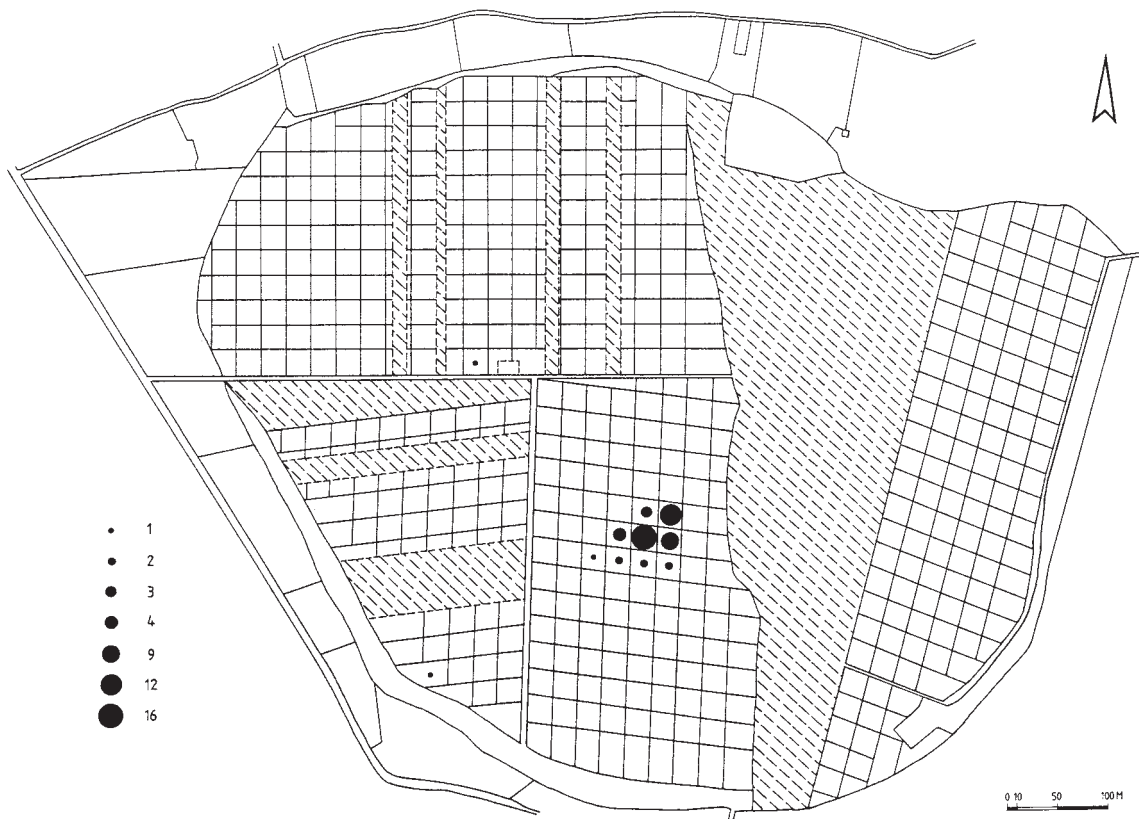


Fig. 6. Muro Tenente. Density per quadrat of Italian sigillata.

factors. But, evidently, we have to account for social and economic variables as well. It is equally clear, however, that to evaluate the impact of these variables, the findings have to be compared with the available datasets of the whole region. Within this larger context the incorporation of some of the major settlements into the regional survey project also appears to full advantage; the various settlement types may be readily compared on the basis of corresponding research techniques.

From such a regional perspective, settlement hierarchy can be shown to develop in Salento as early as the Archaic period. In this phase at least one settlement in the Brindisi district, Oria, is characterized by primary signs of urbanisation (Lombardo 1984; D'Andria 1988; Yntema 1993). A similar development may be recognized in some other polities in the rest of Salento (Cavallino, Ugento). By the early Hellenistic period more Salento sites follow and become fortified, among them possibly Muro Tenente. The sites we have investigated so far are characterised by a marked expansion of their inhab-

ited area in this phase. In this respect they may be held representative for the other fortified sites on the Salento isthmus. Considering the differences in sizes of their inhabited areas, one may posit that settlement differentiation now becomes even more accentuated. Furthermore, besides the fortified sites there existed various types of open sites throughout the countryside.

For an understanding of these developments we have to relate them to the results of recent archaeological research in Salento, from which one may infer a general trend towards social, political and economic complexity in local society (see especially D'Andria 1988; 1993).

Similarly, we must turn to the local communities if we are to explain settlement changes in Roman times. Traditionally, scholars concentrating on early Roman Southern Italy have tended to view them as static and uncomplex and to deny them a significant role in the scenarios of dramatic change after the Roman conquest. Such a view is reminiscent of a dichotomy between pre-Roman

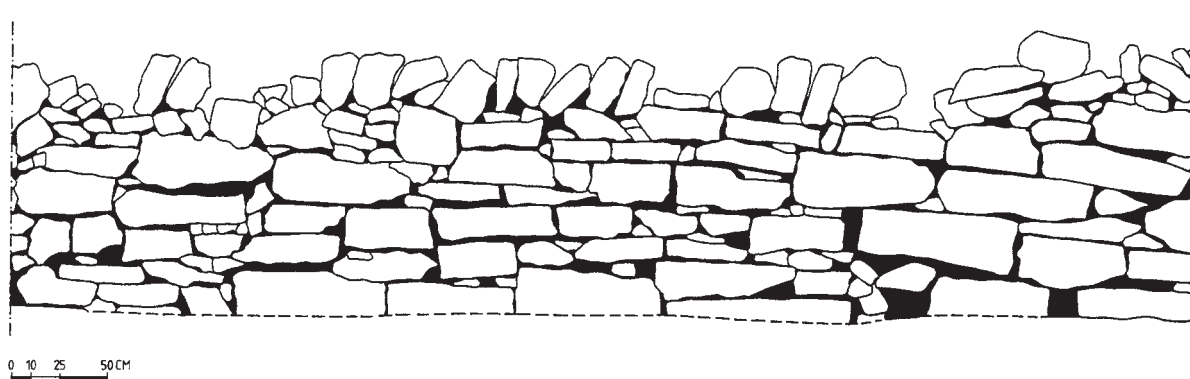


Fig. 7. Muro Tenente. Drawing of inner facing of the defences. For the location of this section see Fig. 1, 6.

(greco-centric) and Roman (romano-centric) research. As is gradually becoming clear, there existed notable regional variation in pre-Roman societal complexity, resulting in different trajectories of romanisation. Therefore, in order to explain the contraction of the settlement of Muro Tenente in the Roman period it does not suffice to refer only to the depopulation of the South-Italian countryside due to the Hannibalic war and subsequent Roman military and economic considerations. We will also focus attention on the responses of the indigeneous society to the specific circumstances prevailing in the various stages of roman intervention.

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## The Velsen gems (2)

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The Roman gemstones from Velsen found prior to 1980 have been covered by four different publications: P. Vons (1975, 1979) published the gems from Velsen 1 (16-28 A.D.), H.J. Calkoen and H. van der Wees (1955) described two gems from Velsen 2 (40-50 A.D.), while M. Maaskant-Kleibrink (1980) reviewed the gems from both sites. Since then 26 gemstones have come to light during the most recent excavations. These form the basis of this article and a reexamination of the conclusions in the former publications will be presented. The early Roman harbour-fortress Velsen 1 has been published as a Ph.D. thesis by J.-M.A.W. Morel (1988).

The main problem surrounding the study of gem collections is that they usually consist of a large group of stray finds without any datable, geographical or social context. The close dating of the occupation of the fortress Velsen 1 offers an excellent opportunity to place gems, and the styles of decoration used, in a chronological context. Certain find categories from Velsen 1, such as the coins, date occupation of the site in the period between 15 and 30 A.D.<sup>1</sup> Other find groups, such as the amphorae, show that the site must have been abandoned before 35 A.D.<sup>2</sup> A few gemstones were found in features (41, 42, 49, 53, 55, 61, 62), some of which are datable. Three of these gems were found in the harbour of the fortress, one (61) in the Dredge layer (16-21 A.D.), the other two (42, 55) in the Roman layer (21-28 A.D.).<sup>3</sup> Gem 41 can be dated to before 28 A.D. since it was found in a well in which a Roman legionary was buried. He was probably killed during the Frisian Revolt in the battle around the fortress in 28 A.D.<sup>4</sup> Other finds which are associated with that battle are over 500 lead sling-shots found west of the fortress, as well as weapons and human remains in the harbour on top of the Roman deposits. The other gems from Velsen were found in the so called „dirty sands”, the remains of the Roman top soil which was eroded in medieval times.

Some 3rd-century finds have also been recovered from the site: two coins, a fragment of a roof tile with a stamp of the Roman fleet (*CGPF*), some fragments of a colour-coated beaker from Trier and some sherds of Eastern Gaulish terra sigillata. The context of these finds is not clear. Calkoen, Van der Wees and Vons merely described the gems and

presented them in a catalogue. Only Maaskant-Kleibrink (1980, 3 nos. 9, 26 and 39) attempted to date the gems by studying the techniques or styles used. She concluded that three gems, of the 39 described, date to the 3rd century. The origin of three other gems is sought in a „provincial atelier” dating to the first half of the first century A.D.<sup>5</sup> It may be questioned whether style alone is sufficient to adduce a 3rd century date: these gems could equally well have been cut in a „provincial atelier”. Vons argued in 1986 that the 3rd century finds might have been related to a military re-occupation of the site, in a period in which there was increased military activity along the borders of the Empire, stressing however that the basis for such an hypothesis is small. Another possibility is that these finds were transported to a native settlement as Roman import goods. A similar explanation can be given to the Roman imports in other native sites in Noord-Holland<sup>6</sup>. The very small number of 3rd-century finds is insufficient to date the three gems in question to the 3rd century.

Because of later erosion, the scatter of the Velsen gems does not reflect a pattern of loss, but rather how and with what techniques the site was excavated (*Fig. 2*). Several gems were found by sieving. The harbour area was excavated by hand trowling, whereas the interior of the fortress was cleared mechanically.

The Velsen gems were all found within or near the fortress. Although a few finds from Velsen, e.g., shoes and Pannonian belt fittings, may also be associated with woman and children, the context is indisputably military, with both legionary and auxiliary units in evidence. These gems, therefore, most probably belonged to soldiers.

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<sup>1</sup> Vons 1977; Vons 1986.

<sup>2</sup> Goudswaard 1991.

<sup>3</sup> The Romans kept the harbour clear by dredging the deposit which silted up the harbour, and moved this material to the deepest part of the gully on which the harbour was situated. The dredging can be dated before the building of a jetty joining on to the western mole in 21 A.D. After this date the Roman Layer was deposited on top of the Dredge Layer.

<sup>4</sup> Morel and Bosman 1989.

<sup>5</sup> Maaskant-Kleibrink 1980, 3 (Nos. 9, 10, 16, 23, 26, and 39).

<sup>6</sup> Zoetbrood 1985, 41; Diederik 1989, 133.



	Cornelian	Sard	Onyx	Agate	Glass
Emperor			1		2
Portraits	2		1		2
Gods	11		2	1	
Erotica etc.	9	1	1		6
Mythological	3	1			
Animals	5		2	1	4
Symbols etc.	2		1		
Text					1
Military (?)	1	1	1	1	
Indet	1				1

Fig. 1

All the Velsen gems were reexamined in order to identify the type of stone from which they were cut:

The material used is: Cornelian: 34, Sard: 3, Onyx: 9, Agate: 3, Glass: 16, Total: 65.

It is interesting to note that all of the gems which Maaskant-Kleibrink dated to the 3rd century are cut in cornelian. This type of stone continues to be used in the 2nd and 3rd century A.D., as for example in Valkenburg (Z.H.)<sup>7</sup>, though the percentages are much lower than in a 1st-century context. In later periods many more gems are cut in jasper and nicolo, neither of which are present among the Velsen gems<sup>8</sup>.

The depictions on the Velsen gems cover a variety of subjects: the number of examples is given for each category: Imperial portraits (3), portraits and masks (5), gods (14), erotic-bucolic-bacchantic-rural images (17), mythological beasts (4), animals (12), symbols (3), text (1), military (?) (4), and indeterminable depictions (2).

The categories are not exclusive, and a number of gems combine elements. Thus, the portrait of Augustus (?) on gem 40 is surrounded by symbols, and the portrait on gem 41 can also be determined as a military depiction. A correlation of depiction and stone type gives the following results (*Fig. 1*). Note the high percentage of cornelian stones with depictions of gods and goddesses. The glass gems in this category also have a yellow or orange colour. There is only one gem which is made of black glass (47). Also interesting are the images of the

Emperor, two of which are made of glass. A high production is possible when glass is used to produce gems, especially when the image is not cut but moulded. Thus this material is very useful imperial propaganda allowing the dispersal of large numbers of images.

Little is known about the rings as most gems were found loose. Only six small fragments of iron rings have been recovered, and it appears that at Velsen only iron was used in combination with gemstones. Other than the seven key rings, all bronze rings are plain and may not have been finger rings at all.

#### CATALOGUE

- a. description
- b. material
- c. colour
- d. measurements
- e. find number
- f. publication
- g. literature

40.

- a. Portrait with symbols: a male portrait with helmet (Augustus?) en profil to right. Around the head symbols: an oil lamp, a shield, a hand, and perhaps the head of a bird.
- b. glass

<sup>7</sup> Bosman 1990.

<sup>8</sup> Table 3 in Riha 1990, p. 15, was used for the description of the stones



Fig. 2. Velsen I phase 3, the scatter of gems. Legend: 1. gem found by trowling in the 'dirty sands', 2. gem found by trowling 'in situ' (in the Roman deposits in the harbour and in wells), 3. gem found as stray find.

- c. orange-yellow  
d. 11? x 9.4 x 1.2 mm  
e. trench 16  
f. Bosman 1992, 47.  
g. Henig 1975, App 41; Furtwängler 1986, 5172-5175 and 8040 (all without a helmet); Vollenweider 1972-1974, Taf. 145, 10 (head with helmet between symbols over a ring).
41.  
a. Man with helmet: en profil, to right. The gem is complete, but has a lot of fractures due to the corrosion of the iron ring. The fractures obscure the most important parts of the face: the eyes, nose and mouth. On his head a crested helmet, possibly a depiction of Mars or an hero. The signetring was found together with the complete skeleton of a Roman legionary. This grave can be dated: 28 A.D.  
b. glass  
c. yellow  
d. 10 x 8.5 x ? mm  
e. well 2 (150-200 cm)  
f. Morel and Bosman 1989, blz. 171, fig. 3; Bosman 1992, 37.  
g. Maaskant-Kleibrink 1978, 98, 294 (bearded man); Zwierlein-Diehl 1973-1979, 122-123; Dimitrova-Milcheva 1981, 169; Henig 1974, 467; Zwierlein-Diehl 1973-1979, 287 (young Mars); Schlüter 1975, 558; Henig 1987, 161-165.
42.  
a. Apollo: portrait en profil to right. The god is wearing a headband or a wreath. In the neck a ribbon can be seen. This gem was found in the „Roman layer” in the harbour, which can be dated between 22 and 28 A.D.  
b. agate  
c. brown-orange flamed  
d. 13.2 x 12.9 x 1.9 mm  
e. CC-16r  
f. Bosman 1992, 56.  
g. Vollenweider 1984, 60; Brandt 1968-1972, 2345; Scherf 1970 (Braunschweig) 148.
43.  
a. Portrait of a man with beard: en profil to right. Several interpretations are possible: e.g. Jupiter, Bacchus, Hercules or a mask.  
b. cornelian  
c. red  
d. 10 x 8.1 x 1.8 mm  
e. P100  
f. Bosman 1992, 58.  
g. Furtwängler 1896, 7793 (bearded character mask).
44.  
a. Two masks: en profil a bearded male mask with a wreath around the hair, damaged at the back of the head. To the right a second, female mask, with open mouth, partially obscured by the first.  
b. cornelian  
c. orange-red  
d. 10 x 9.5 x 2 mm
- e. trench 80-5  
f. Bosman 1992, 45.  
g. Maaskant-Kleibrink 1978, 325; Zwierlein-Diehl 1969, 214; Schlüter 1975, 636-637.
45.  
a. Mercury: only 1/5th of the gem remains with the back of the head of Mercury and over his shoulder a caduceus, to left.  
b. cornelian  
c. orange  
d. ? x ? x 2 mm  
e. trench 80-5  
f. Bosman 1992, 46.  
g. Mercury is a common depiction. Dimitrova-Milcheva 1981, 61-71; Henig 1974, 38-50; Sena Chiesa 1964, 165-192.
46.  
a. Fishing Amor: Amor en profil to right, in his hands he is holding a fishing net (or a diabolos?). Groundline. A fracture across the gem.  
b. cornelian  
c. orange  
d. 9.5 x 8 x 1.9 mm  
e. trench 14  
f. Bosman 1992, 44.  
g. Dimitrova-Milcheva 1981, 142 (Amor over a torch); Sena Chiesa 1964, 287; Richter 1971, 304 (Amor with both hands on a torch); Furtwängler 1896, 3891.
47.  
a. Amor and cock: A fat naked Amor in kneeling position is holding a cock with his righthand. The left side of the gem is damaged. A second cock may have been depicted on this spot.  
b. glass  
c. black  
d. ? x 9 x 2.2 mm  
e. trench 81-12  
f. Bosman 1992, 49.  
g. A common motif on Roman gems, usually an Amor or a Satyr playing with animals. Maaskant-Kleibrink 1978, 454-455; Furtwängler 1896, 6789 (Amor between two cocks); Maaskant-Kleibrink 1975, 88.
48.  
a. Bacchus: head of a bearded man en face. Because the gem is worn, the image is not clear. One third of the lower part of the gem is missing. Only Bacchus, or his help Silenus are depicted en face. On this gem the man still has hair on his head, so most probably it is an image of Bacchus. The gem has a rectangular shape.  
b. glass  
c. blue on black  
d. ? x 7.9 x 1.5 mm  
e. Q96  
f. Bosman 1992, 59.  
g. Maaskant-Kleibrink 1978, 104a; Zwierlein-Diehl 1973-1979, 328 (Bacchus) and 329-330 (Silenus); Zazoff 1983, Taf. 82; Furtwängler 1900, Pl. XLI no. 6; Brandt 1968-1972, 929 (Silenus); Krug 1980, 192.



49.  
a. Combination: en profil, to the right a panther and to the left Silenus. Part of the iron ring survived.  
b. onyx  
c. bluegrey on black  
d. 12 x 10 x 2.5 mm  
e. S89-480 layer 3  
f. Bosman 1992, 62.  
g. Zienkiewics 1987, p. 16 (Silenus and eagle).
50.  
a. Hunter and prey(?): en profil to right a hunter with a bow on his back, bending over an animal with his left hand to his face, his right hand to the animal. Another explanation may be that the man is playing with his dog, while the animal left of him jumps towards him. Groundline. The gem has a rectangular shape.  
b. cornelian  
c. orange-yellow  
d. 9.1 x 7.6 x 1.8-2.2 mm  
e. trench 81-15  
f. Bosman 1992, 54.  
g. Dimitrova-Milcheva 1981, 122; Maaskant-Kleibrink 1975, 20; Henig 1974, 502.
51.  
a. Standing man and kneeling figure: standing man to left, in his right arm he is holding a shield, his knee is attended to by a smaller kneeling figure to his left. Another interpretation is that the larger hero is about to strike or stab the smaller figure. Very fine details, moulded depiction? Possibly Menelaos and Machaon.  
b. glass  
c. yellow  
d. 12 x 10 x 1 mm  
e. trench 12 (sieving)  
f. Bosman 1992, 42.  
g. Furtwängler 1896, 681-687, and 483; Sena Chiesa 1964, 909; Henig 1974, 436; Guiraud 1988, 441 (Menelaos and Machaon).
52.  
a. Satyr and Maenade: en profil to left. A Satyr is bearing a Maenade on his back and holding her with both hands. Along the upper edge damaged and from top to bottom a fracture.  
b. glass  
c. white on black  
d. 11 x 10 x 2.2 mm  
e. Feature 89-696 north  
f. Bosman 1992, 63.  
g. Dimitrova-Milcheva 1981, 120.
53.  
a. Panther with Thyrsus: en profil, the panther is looking backwards over his shoulder, behind the animal a thyrsus which is held in the left claw. The thyrsus shows that the animal can be associated with Bacchus. The tail is hanging down. Groundline. The gem is still partly set in its iron ring. From top to bottom a fracture.  
b. glass  
c. yellow  
d. 11 x 10 1.5 mm  
e. h1164 (posthole Eastern jetty, trench 7-9)  
f. Bosman 1992, 50.  
g. Henig 1974, 641; Maaskant-Kleibrink 1978, 492; Sena Chiesa 1964, 1181; Furtwängler 1896, 6558; Krug 1980, 404.
54.  
a. Griffin on deer(?): en profil to the right, on the ground a deer or goat is crouched with head upright and held by the fore-claws of a griffin which bites its neck. The griffin's back-claws stand on the hind-leg of the deer or goat.  
b. cornelian  
c. orange  
d. 13.2 x 12.2 x 1.5 mm  
e. trench 81-15  
f. Bosman 1992, 53.  
g. Walters 1926, 1852 (griffin on lion); Sena Chiesa 1964, 1202; Richter 1971, 110; Furtwängler 1896, 364; Zwierlein-Diehl 1986, 29-30.
55.  
a. Octopus and shrimp?: A shrimp over an octopus both en profil to right. The gem is set in an iron signet ring. The gem is broken in several small pieces due to the corrosion of the iron. The gem was found in the „Roman layer” in the harbour, date 22-28 A.D.  
b. glass  
c. white on black  
d. 13 x 12 x 2.5 mm  
e. trench 9-4  
f. Bosman 1992, 43.  
g. Maaskant-Kleibrink 1980, 26 (dolphin and shrimp); Henig 1974, 717 (shrimp and fish); Maaskant-Kleibrink 1975, 134 (nicolo with two dolphins).
56.  
a. Goat or capricorn: only one quarter of the gem is preserved. On the remaining part the head with horns and beard of a goat or capricorn and a raised fore-leg is depicted en profil to right.  
b. glass  
c. yellow  
d. ? x ? x 1.2 mm  
e. P99  
f. Bosman 1992, 57.  
g. Maaskant-Kleibrink 1978, 168 (goat), 91 and 181 (capricorn); Dimitrova-Milcheva 1981, 224-225; Maaskant-Kleibrink 1975, 96; Henig 1974, 664.
57.  
a. Bull: en profil to right. The animal has clearly depicted horns. Some grass leaves in front of its snout.  
b. cornelian  
c. orange  
d. 9.6 x 7.9 x 2.1 mm  
e. 90-XXI-16-335  
f. Bosman 1992, 64.  
g. Dimitrova-Milcheva 1981, 185; Henig 1987, 352.

58.  
a. Bull: en profil to right. The style of engraving is more precise than the previous one. The wrinkles in the skin are clearly depicted. Groundline with in front and under the animal grass. Light cracks in the stone behind the shoulder on the body and over the animal.  
b. cornelian  
c. orange  
d. 12.5 x 10.5 x 1.7 mm  
e. Stray find trench 89-2  
f. Bosman 1992, 65.  
g. Henig 1974, 598; Henig 1987, 352 (without grass); Platz-Horster 1987, 86 (head held down, without grass); Krug 1980, 215; Guiraud 1988, 675-677.
59.  
a. Cornucopiae, two ears and a cricket: depiction of good luck symbols. Top left a Cornucopiae, to the right two ears and below en profil a cricket to right.  
b. onyx  
c. black  
d. 14 x 12 x 2.5 mm  
e. LV6700  
f. Bosman 1992, 51.  
g. Henig 1974, 405 (rudder, ear and Cornucopiae); Sena Chiesa 1964, 1441; Walters 1926, 2546 (cricket and ear).
60.  
a. Biga: en profil to right. Man in short tunica, in his righthand he is holding a whip, in his lefthand he is holding the reins of the two horses.  
b. onyx  
c. black  
d. 15.2 x 12.1 x 2 mm  
e. M66  
f. Bosman 1992, 48.  
g. Maaskant-Kleibrink 1978, 166; Sena Chiesa 1964, 859-860; Brandt 1968-1972, 3 no. 2243; Walters 1926, 2122; Henkel 1913, 1441; Henig 1987, 62; Guiraud 1988, 164.
61.  
a. Biga: same theme as gem 60. The sides are damaged in two places. The gem was set in an iron ring. It was found in the Dredge layer in the harbour, which can be dated between 16 and 21 A.D.  
b. cornelian  
c. orange  
d. 11.5<sup>?</sup> x 9.4 x 1.9 mm  
e. DK-12b  
f. Bosman 1992, 60.  
g. as gem 60.
62.  
a. Horseman with lance on a horse: en profil to right a horseman with a lance on a prancing horse. Groundline. On the back there are traces of an iron ring.  
b. sard  
c. brownish-orange  
d. 12.2 x 12.2 x 2.1 mm  
e. h7038 (posthole northern jetty)
- f. Bosman 1992, 55.  
g. Zwierlein-Diehl 1973-1979, 316; Sena Chiesa 1964, 857; Dimitrova-Milcheva 1981, 134; Henig 1974, 33; Brandt 1968-1972, 1 no. 754.
63.  
a. Two-master galley: en profil to right. This is an unique depiction of a two-master. Ships with one mast or without masts, but with a number of soldiers on deck are more common. Another possibility is that a number of 'Vexila' are depicted. Behind the warship the rudder and amidships a series of oars.  
b. agate  
c. grey on black  
d. 9.1 x 8.5 x 2.1 mm  
e. 89-IV-6-463  
f. Bosman 1992, 61.  
g. Platz-Horster 1987, 250 (ship with 3 'Vexila'); Henig 1974, 533 (ship with an eagle and a 'Vexillum' of a legion). Ships with one sail and a differently shaped hull usually are described as merchant vessels: Henig 1974, 538; Guiraud 1988, 556-557.
64.  
a. Standing figure: head and part of the breast visible. Damaged, two third of the rightside is missing. The gem is badly worn.  
b. glass  
c. white-orange  
d. ? x ? x 3 mm  
e. trench 1  
f. Bosman 1992, 40.  
g. Sena Chiesa 1964, 909.
65.  
a. Woman, two palm fronds and a column(?): it is very difficult to identify this gem because more than half of it is missing. En face a woman possibly reclining, a column to her right, with two palm fronds arching over to the left.  
b. cornelian  
c. orange-red  
d. ? x ? x 2 mm  
e. D65  
f. Bosman 1992, 52.  
g. Zwierlein-Diehl 1973-1979, 239 (Ariadne laying under a tree and Satyr(?); Zwierlein-Diehl 1986, 353 (Centaurin lying down feeding her child); Furtwängler 1896, 7501 (two fighting Amors under palmbranches); Guiraud 1988, 521 (sacrificial scene under trees).

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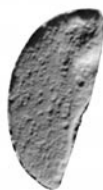
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# Castor, Caracalla, and the so-called Statue of Sol in the North Carolina Museum of Art

Steven E. Hijmans

## INTRODUCTION

Ten years ago, the North Carolina Museum of Art acquired a Roman statue which Cornelius C. Vermeule has identified as Caracalla in the guise of Helios-Sol, and has dated to 205 A.D. (Vermeule 1990). According to Vermeule, the statue not only represents Caracalla as Sol, but also links him closely to Alexander the Great, for in many respects its features closely echo portraits of the Macedonian ruler. Vermeule believes that the Roman sun-god Sol was ultimately derived from a syncretism of Alexander and Helios, which would explain how this linkage of Caracalla, Alexander, and Sol/Helios came about (*Figs. 1-2*). I disagree with his conclusions, however. As I shall argue in this article, Vermeule exaggerates both the links between the Roman Sol and the Greek Helios, as well as those between Helios and Alexander. In fact, I do not believe that the statue represents Sol (in any guise) at all, and I shall present an alternative interpretation of the statue in this article<sup>1</sup>.

## SOL INVICTUS

The Roman sun-god is an enigmatic figure. Usually it is suggested that there were actually two subsequent sun-gods in Rome. The first, Sol Indiges, was a god whose origins should be traced to the earliest existence of Rome. He is considered to have been a minor god, and it is said that his cult had disappeared completely before the second century A.D. Rome, it is claimed, then lacked an active cult of the sun-god for almost a century until the totally different, Imperial sun-god Sol Invictus came to the fore in Rome under the Severi, and most notably under Heliogabulus (218-222). This sun-god, most scholars believe, was not Roman at all, but one of the Syrian Ba'alim. The cult practices associated with him, which were said to include self-castration, ritual prostitution, and even child sacrifices, are thought to have been so offensive to the Romans that the cult did not win many adherents in Rome at first. After the death of Heliogabulus it is thought that Sol Invictus virtually disappeared from view until he was reinstated

by Aurelian (270-275) as *Dominus et Deus Imperii Romani*. Many believe that for the next 50 years he was one of the most important gods of Rome, until his cult, like that of all pagan gods, was supplanted by Christianity<sup>2</sup>.

This interpretation of the Roman sun-god or sun-gods, still the most common one in modern scholarship, is not shared by Vermeule. He quite rightly stresses the fact that archaeological evidence (hitherto usually ignored), shows that the cult of the sun-god never disappeared from Rome, but was present throughout the first, second and third centuries A.D. It was this continuous Roman cult of the sun, he feels, that inspired the statue in Raleigh, and not some new Syrian cult.

Ultimately, Vermeule traces the origins of the cult of Sol in Rome to Hellenistic Egypt, and claims that it represents a fusion of Alexander the Great and the sun-god. In his words, "the Hellenistic Greeks saw the rising sun as a personified symbol of Alexander the Great's conquests of the East, and

I would like to thank Dr. E. Ivison, Prof. Dr. M. Maaskant-Kleibrink, and Dr. E.M. Moormann for their helpful comments and advice, and Dr. M.E. Soles, curator of Ancient Art in the North Carolina Museum of Art, for her assistance and interest. *Fig. 1-2, 8-9* Photographs courtesy of the North Carolina Museum of Art. *Fig. 3* L'Orange 1935, 91 fig. 4e, photograph DAIR 1935.545. *Fig. 4* Photograph DAIR 4713 detail. *Fig. 5* Photograph DAIR 57.319. *Fig. 10* L'Orange 1935, 91 fig. 4k, photograph DAIR 1935.551. *Fig. 11* Photograph DAIR 61.1950. *Fig. 12* Photograph DAIR 68.4972.

<sup>1</sup> I am currently involved in the study of the Imperial Roman sun-god, Sol Invictus, and therefore became interested in this statue; it was the first time I came across a surviving full-length statue, identified as an emperor represented as Sol.

<sup>2</sup> Literary sources for the Republican Sol Indiges are scant; cf.: Var. 1, 5,74, Dion. Hal. *Ant.* 2,50,3, Aug. *C.D.* 4,23, Paul. Fest. 22,5 ff L. *A vetus aedes apud circum* for Sol (Indiges?) is mentioned by Tacitus (*Ann.* 15,74,1); cf. Tert. *Spect.* 8,1. Quintilian (*Inst.* 1,7,12) mentions another temple on the Quirinal and Sol Indiges also had a temple in Lavinium (Dion Hal. *Ant.* 1,55,2; Plin., *NH* 3,56). For feast-days dedicated to Sol (August 8th & 9th, December 11th) cf. *Fast. Vall. CIL* I<sup>2</sup> p. 240, *Allif. loc. cit.* p. 217, *Amit. loc. cit.* p. 244; Lyd. *Mens.* 4, 155. Little has been written on Sol Indiges; cf. Koch 1933; Richard 1976. For the common position that Sol Invictus was a Syrian god, formulated in the 19th century, cf. Halsberghe 1972 & 1984. Although doubts have been voiced by Seyrig 1971, 1972 and Chirassi Colombo 1979, this position is still generally adhered to. I am currently preparing an article revising this point of view. On Heliogabulus cf. Frey 1989.





*Fig. 1. Marble statue, identified as Emperor Caracalla in the guise of Helios/Sol; Roman, early 3rd century A.D. North Carolina Museum of Art, Raleigh, purchased with funds from the North Carolina Art Society (Robert F. Phifer Bequest).*



*Fig. 2. Marble statue, identified as Emperor Caracalla in the guise of Helios/Sol; Roman, early 3rd century A.D. North Carolina Museum of Art, Raleigh, purchased with funds from the North Carolina Art Society (Robert F. Phifer Bequest).*



Fig. 3. *Follis*, reverse; *Sol Invictus*; Constantinian period.

the young, athletic god with long locks and radiate hair came to take on the divine Macedonian's features" (Vermeule 1990, 32).

I agree with Vermeule's implicit rejection of the common view that under the Severi a new, Syrian sun-god was introduced into Rome. However, Vermeule's own reconstruction of the cult of Sol, and notably his contention that it derives from Egypt and the Hellenistic fusion of Alexander and Helios, is not satisfactory either. On the one hand, his line of argument derives from the presumption that many Hellenistically inspired representations of Sol take on the features of Alexander the Great. He seems to tend to overstress his case, however, for Smith (1988, 59, 111) rightly warns against the common confusion of style and content in studies of Hellenistic sculpture. I believe that the majority of the traits that Alexander and Sol have in common – in the cases Vermeule refers to – are simply elements of Hellenistic style in the portrayal of an idealized youth.

Furthermore, there is little firm evidence for a strong link between Alexander and Helios, and certainly not in Egypt, where he devoted most of his attention to Zeus Ammon. Nor did his successors show any signs of an extensive or specific devotion to Helios<sup>3</sup>. The fact that Hellenistic rulers were sometimes depicted with rays around their heads does not link them specifically to the sun-god (see

infra), nor is there any indication of a significant expansion of Solar worship in the Hellenistic world. Vermeule mentions the colossus of Rhodes, but this statue should be seen in its context. As early as the fifth century B.C. coin-types on Rhodes were dominated by Helios, and this role of Helios as patron deity culminated in the erection of the famous Colossus of that god<sup>4</sup>. There is no reason to suppose any specific influence of Alexander on either the Colossus itself or on the Rhodian cult of Helios.

In my view, Sol, whether *Indiges* or *Invictus*, was a Roman sun-god, worshipped in Rome continuously from its earliest history to the time of Constantine (and beyond). Links between this Roman Sol and the Greek Helios were no closer than between, for instance, Jupiter and Zeus. Thus if we accept that there was no overriding influence of Alexander on Helios, and no specific link between Helios and Sol, then even if a reference to Alexander was intended in the Roman statue in the North Carolina Museum of Art, such a reference has no direct relevance for the suggestion that the statue also represents Sol, or Caracalla as Sol.

#### STATUES OF SOL

The *LIMC* does not list any surviving full-length Roman statue securely identified as either Helios or Sol. Vermeule (1990, 48) does mention two parallels, but these statues, though once identified as the sun-god, are now interpreted differently.<sup>5</sup> The statue in North Carolina, if it truly represents Sol, would therefore be virtually unique.

There can be no doubt, however, that full-length statues of Sol existed in antiquity. According to

<sup>3</sup> On the deified Alexander, notably as thirteenth god (next to the dodekathēoi), cf. Kreikenbom 1992, 13. On the problems in general concerning the assimilation or identification of Hellenistic rulers with gods, cf. Smith 1988, 44-45.

<sup>4</sup> This prominence of Helios on coins coincides with the founding of the city of Rhodes in 411 B.C., after the synoikismos of Ialysos, Kaminos and Lindos; cf. Kreikenbom 1992, 20-21.

<sup>5</sup> The statue in Paris would sooner be a Lar than Sol (S. Reinach, *Répertoire de la statuaire* 1, Paris 1897, 169 nr. 7). The one in the Ny Carlsberg Glyptotek in Copenhagen (F. Poulsen, *Catalogue of Ancient Sculpture*, Copenhagen 1951, 366 nr. 525, pl. XXXIX) forms part of a group of dubiously reconstructed statues. The *LIMC* s.v. Helios (342) mentions it under the heading *Deutung Unsicher*, but it is, in fact, doubtful whether it ever existed in its present form. According to Squarciapino (1943, 38), the fragments of at least five statues (including this one), found together, were reconstructed "senza molta scrupolosità tanto che è dubbia la pertinenza delle teste ai tronchi e delle statue stesse ai plinti cui furono ravvicinate". The mural crown with rays (partly restored) is unprecedented for Sol, and the statue has no further attributes linking it to the sun-god (if the base, the torso, and the head belong together at all).



L'Orange (1935, 34), for instance, the common figure of Sol on coins of the third century A.D. reflected a popular cult statue in Rome (*Fig. 3*). Heads of Sol, possibly from statues, have been found in Mithraic shrines as well as on the agora of Athens<sup>6</sup>. References to statues of Sol exist in literature as well – one need but think of the famous Colossus of Nero, transformed by Vespasian into a statue of the sun-god<sup>7</sup>. Thus there is nothing inherently unlikely in the idea that a statue of Sol has survived.

#### THE EMPERORS AND SOL

Vermeule identifies the statue in North Carolina not simply as Sol, but as the young Caracalla in the guise of Sol. This implies a close link between the emperor (or in this case, his eldest son) and the sun-god. We know that various emperors had a special reverence for the sun-god. This is especially true of Aurelian (270-275), who is often referred to as the most important imperial supporter of the cult. Many, in fact, have suggested that he introduced, or at least reintroduced the cult of Sol Invictus in Rome<sup>8</sup>. In this they must be mistaken, however, for they forget that his predecessors Gallienus (253-268), Claudius Gothicus (268-270) and Quintillus (270) also showed strong interest in the sun-god<sup>9</sup>. The same is true to some extent for earlier rulers such as Trajan (98-117), Hadrian (117-138), the emperors of the Severan Dynasty (193-235), and others as well. This interest was still maintained by Constantine in the earlier part of his reign, for he continued to strike coins with Sol as late as 324 A.D. It seems clear that a number of emperors claimed special protection by the sun-god, or some other special connection with him. Iconographically, this special relationship with Sol was shown in various ways. On coins a bust of Sol was placed immediately behind that of the emperor<sup>10</sup> (*Fig. 4*), and Sol was sometimes depicted handing over a globe, symbol of power, to the emperor<sup>11</sup>, or is shown crowning the emperor with a wreath<sup>12</sup>. In certain cases the iconography of the emperor echoes that of Sol<sup>13</sup>. But with the dubious exception of one or two coins of Constantine<sup>14</sup>, I do not know of any cases where an emperor is represented as identical to Sol<sup>15</sup>.

#### RADIATE CROWNS

Some scholars have argued that the fact that emperors were represented on coins wearing radiate crowns is proof enough of their identification

with Sol, as the radiate crown should be interpreted primarily as a solar symbol. This position must be rejected, however. The radiate crown of the emperors is always represented as an actual physical object rather than a divine emanation, and evidence suggests that it was part of imperial ceremonial dress. As an object which really existed it differs fundamentally from the various forms of symbolic light (rays, nimbus, radiate nimbus) emanating from the head of Sol and other deities. Even in the tiny portraits on coins this difference is carefully maintained, for the emperor is always depicted with a type of radiate diadem, bound together at the back of his head with ribbons hanging down in the nape of his neck. Busts of Sol are always represented with a radiate crown lacking those ribbons (*Figs. 5-6*).

Furthermore, rays and other forms of symbolic divine light were not by any means limited to Sol or Helios in antiquity. Smith (1988, 42, 44) stresses that the symbolic meaning of radiate crowns worn by Hellenistic rulers simply expressed their divine status, without referring specifically to Helios at all. Therefore the Roman imperial radiate crown, which was probably modelled on the Hellenistic one, cannot be taken a priori as a solar symbol either, and indeed the evidence indicates that it was not considered as such. From the last quarter of the first century A.D., all emperors were routinely

<sup>6</sup> Mithraic temples: *LIMC* IV s.v. Helios/Sol, 12, 13; Athens: Frantz 1988, 41.

<sup>7</sup> Kreikenbom 1992, 95-97.

<sup>8</sup> Cf. Halsberghe 1972, 1984; von Heintze 1983; Del Ponte 1992, 244-250; Fowden 1993, 46. The best summary of the interpretation developed in the nineteenth-century is given by Wissowa 1912, 365-368.

<sup>9</sup> On Gallienus and Sol cf. Rosenbach 1958, 41-52; De Blois 1976, 165-169.

<sup>10</sup> Cf. *RIC* V.2 45 nr. 263, 388 nrs. 12-13, 389 nrs. 21, 25. etc.

<sup>11</sup> Cf. *RIC* V.1 297 nr. 282, 300 nrs. 312-315, 305 nr. 353.

<sup>12</sup> *RIC* V.2 61 nrs. 404-406, 67 nr. 456, 167 nr. 225, *RIC* VII 374 nrs. 98-99, 467 nr. 3, 471 nrs. 21-22, etc.

<sup>13</sup> Cf. the relief of Constantine in the eastern passage of the Arch of Constantine in Rome, which appears to form a direct reflection of a relief of Sol in the same passage (*LIMC* IV s.v. Helios/Sol 408). C. Letta lists a substantial number of representations which would show a close relationship between Sol and an emperor (*LIMC* Helios/Sol 408-450); not all are convincing.

<sup>14</sup> *RIC* VI 227 nr. 890.

<sup>15</sup> Pace C. Letta in *LIMC* Helios/Sol 426-450. Letta's identifications hinge on the interpretation of the rays emanating from the head as a purely solar symbol; this is untenable, for such rays are but one of the many ways by which Roman art symbolized divine light (nimbus, radiate nimbus, even radiate wreaths) and many deities were so depicted in antiquity; cf. Collinet-Guérin 1961, 212. Whether the Colossus of Nero, transformed into a statue of Sol under Vespasian, was originally meant as a statue of Nero only, or Nero-Sol, can no longer be ascertained; cf. Kreikenbom 1992, 95-97 (with references). On Nero and Helios in general cf. Neverov 1986 (which deserves careful, but critical reading).





*Fig. 4. Aureus, obverse; jugate busts of Probus and Sol; Serdica, 276-282.*



*Fig. 5. Antoninianus, obverse; bust of Hostilianus, radiate; Rome, A.D. 251.*



*Fig. 6. Ostia, baths of the Marine Gate, frigidarium, floor-mosaic, detail; radiate crown as athletic prize. Ca. A.D. 210.*

represented with radiate crowns on coins which had a double denomination (for example *dupondii*, being double asses, or *antoniniani*, being double denarii). No reference to Sol was intended or taken, for the crown simply helped to denote the value of the coin; indeed, many of the emperors wearing it showed no interest in Sol whatsoever. Only rarely did certain emperors manipulate their radiate crown in such a way that it also referred to Sol, but this was never the radiate crown's sole meaning, or even its prime connotation<sup>16</sup>.

#### SOL, CARACALLA, AND THE STATUE IN THE NORTH CAROLINA MUSEUM OF ART

If we accept Vermeule's conclusion that the statue in the North Carolina Museum of Art represents Sol and also has the features of Caracalla, this makes it both iconographically and ideologically unique. This despite the fact that, as Vermeule pointed out in his article, Severan emperors had close family ties with solar cults. Julia Domna, wife of Septimius Severus, was the daughter of the high priest of El Gabal, the sun-god of Syrian Emesa, while Caracalla's successor, Heliogabulus, was himself a priest of the same god, whom he tried to place at the apex of the Roman pantheon (Frey 1989). Of all imperial dynasties, therefore, that of the Severi would seem to be the most likely to show a special reverence for Sol. However, reverence for a specific deity does not imply that they identified themselves with that deity. It is, in fact, rare to find an emperor identified with any god, and I know of no examples at all in the case of Sol<sup>17</sup>.

The statue is certainly not an obvious portrait of the young Caracalla, and I myself prefer to see it simply as an idealized youth, without any portrait features. But whether one sees in it a portrait of Caracalla or not, I certainly dispute Vermeule's assertion that this statue also represents Sol.

The iconography of Sol in Roman art is very consistent. Sol is invariably a young man, beardless, with fairly long, wavy hair. He always wears a chlamys, but aside from that he is usually naked. Sometimes, however, he also wears a long chiton reaching down to his ankles. His normal attributes are either an orb or a whip. Often he raises his right hand in a characteristic gesture of salutation or blessing. Usually (but not always) he is represented with some form of radiate light (rays, nimbus, or a combination of both) around his head, which is always uncovered (*Fig. 7*; cf. *Fig. 3*).

These rays, simply symbols of divine light, are a common source of confusion. As I have already

pointed out above, the representation of divine light, in whatever form, was never limited to the sun only. In Pompeii, for instance, many deities other than Sol were depicted with a nimbus or rays around their heads, all of them easily recognizable by their attributes or position within a given scene. This common use of symbolic light in art means that a figure should never be identified as Sol only on the basis of rays of divine light. It is clear, therefore, that only a combination of attributes can suggest an identification as Sol. Isolated attributes are insufficient. A number of negative criteria may also assist in the identification: Sol is never depicted as an old man, and he is never bearded. The only clothing he ever wears are a chlamys and sometimes a long chiton. If one excepts the various forms of symbolic light, he is always bare-headed. Taking these iconographic criteria as our point of departure, it is soon apparent that the statue in the North Carolina Museum of Art presents us with a number of difficulties. The statue has twelve holes in the top of its head, presumably for metal rays of some kind (*Fig. 8*). This poses no problems, but what are we to make of the strange head-dress the statue wears in addition to his radiate crown? The face and hair could be appropriate for Sol, but I disagree with Vermeule that the right arm was raised in Sol's conventional gesture of blessing; if anything, the upper arm appears to be slanting slightly downwards from the shoulder – certainly not upwards. The left arm also poses a problem, for it certainly did not hold one of the conventional attributes of Sol (globe or whip). The traces left on the lower arm and the shoulder show that it was a fairly narrow object, probably held in the hand, and leaning against the shoulder, where it appears to have ended (*Fig. 9*). Vermeule's suggestion that it was a torch should be rejected, for the traces are too narrow for a torch, and also the object appears to have been too short. As I shall argue below, I believe that the object was in fact a *parazonium*, or short sword. The statue's chlamys and youthful nakedness would fit Sol's iconography, but the single horses' head, finally, is unparalleled. Sol is regularly represented with horses, and even with horses' heads only, but invariably the number is four, reflecting the fact that Sol drove a four-horse chariot (*Fig. 10*).

<sup>16</sup> P. Bastien (1982) discusses the symbolic meaning of imperial radiate busts on coins. On the radiate crown in general, A. Alföldi (1935, 139-144) still offers the best presentation of the sources; his interpretation of them is primarily a study in *ad sententiam* reasoning. On the difficulties concerning the interpretation of radiate crowns cf. Turcan 1978, 1042.

<sup>17</sup> Assimilation to heroes or demi-gods, such as Heracles or the Dioscuri, was more common.

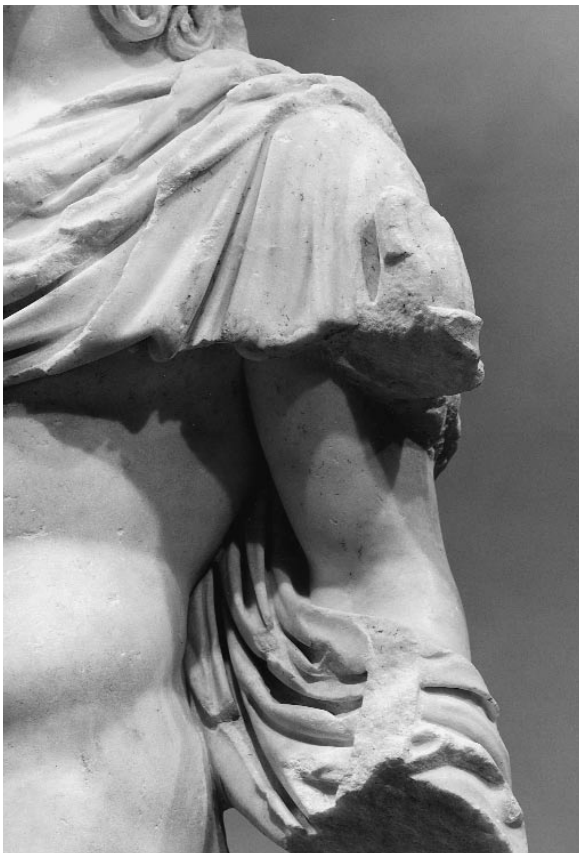




*Fig. 7. Sol, with radiate nimbus, chlamys, globe and whip; fresco, Naples, Museo Nazionale 8819.*



*Fig. 8. Detail of the head of the statue in the North Carolina Museum of Art (cf. figs. 1-2).*



*Fig. 9. Detail of the left arm and shoulder of the statue in the North Carolina Museum of Art (cf. figs. 1-2).*



*Fig. 10. Follis, reverse; Sol Invictus in a frontal four-horse chariot; Antioch, A.D. 310 (Maximianus).*

The head-dress, the missing object from the left arm, and the single horse's head combine to make identification of the statue as Sol difficult. It is far more likely that the sculpture represents one of the Dioscuri. As Vermeule (1990, 39) already pointed out, the single horse's head belongs to their iconography, and the *LIMC* lists a number free-standing statues of the twin stars, each supported by the head of a horse. It describes this type as a Roman invention of imperial times (*Fig. 11*)<sup>18</sup>.

There is a striking similarity between our statue and a statue of Castor in Venice (*Fig. 12*): the right arm, extended to hold a spear, clearly recalls the position of the right arm of our statue, and the object in the left hand, a short sword or *parazonium*, would certainly fit the traces left by the object our statue once held (*Fig. 9*). Even the features of the two statues, including the treatment of the hair, are somewhat similar, though obviously not identical. Furthermore, both are youthful, naked, and wear a short chlamys.

Thus only the head-dress and the rays of the statue in North Carolina need explanation if we take it to represent one of the Dioscuri. In itself, a form of head-dress has many parallels with the Dioscuri, who often wear a small conical cap. The head-dress of this figure is very strange, however, and without parallel. Rays need hardly surprise us in connection with the Dioscuri – twin stars – the more so as we do not know what form the rays had: if the two foremost rays, for instance, supported a star, the identification of the figure as a Dioscure would be certain, for they were regularly represented with stars above their head.

All told, identification of the statue as one of the Dioscuri is therefore more likely than identification as Sol. Certainty, however, would depend on the statue's context. The two Dioscuri were almost invariably represented together, often as mirror images. Obviously, if the statue in North Carolina was originally set up as one of a pair, and the other statue was closely similar to this one, identification with the Dioscuri would be inescapable. Unfortunately, however, nothing is known about the statue's original context. Therefore Vermeule's suggestion that the statue is a portrait of Caracalla gains added interest. For although I am not fully convinced that this identification is tenable, it is worth noting that if the statue does represent Caracalla and was erected in 205 A.D., as Vermeule believes, it is unlikely that it was set up alone. In 205, Caracalla was joint Consul with his younger brother Geta<sup>19</sup>, and it seems likely that in that year especially, any statue erected in honour of Caracalla would have stood next to a statue of his brother and joint consul.

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<sup>18</sup> Statues of this type existed both in the western half of the empire, and in the east, and some of these statues provide close parallels for the statue in North Carolina; *LIMC* III, Dioskouroi/Castores 28-33 (F. Gury), *LIMC* III, Dioskouroi 50-54 (A. Hermay).

<sup>19</sup> *CIL* VI 1670.



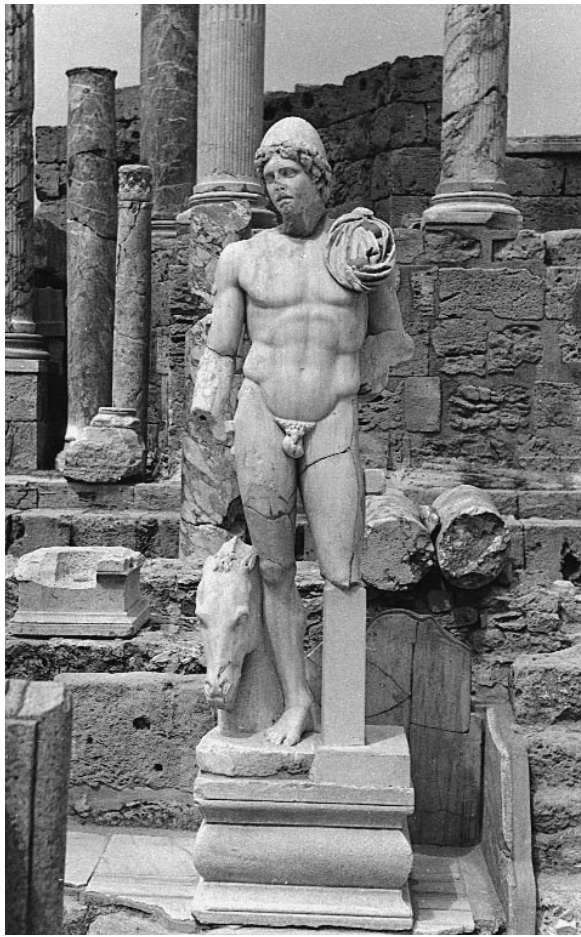


Fig. 11. Marble statue of a Dioscure, Roman, early 2nd century A.D.; Leptis Magna.



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# Le *Monosandalos* dans l'Antiquité

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## PRÉFACE

La présente étude est consacrée à la recherche de la signification des personnages n'étant représentés qu'avec un seul pied chaussé. Le problème n'est pas nouveau. Ces personnages n'apparaissent pas seulement dans la littérature, mais aussi dans l'art figuratif, tant dans l'antiquité grecque que dans l'antiquité romaine. Le phénomène ne s'arrête d'ailleurs pas là. On retrouve le motif jusque dans l'art de la Renaissance. Les dieux comme les hommes peuvent être représentés en *monosandalos*.

Beaucoup de savants se sont déjà penchés sur le phénomène<sup>1</sup>. Différentes explications ont été avancées en fonction des exemples envisagés. En outre, il est évident qu'une explication qui est valable pour un exemple de l'antiquité grecque ne s'applique pas forcément telle quelle à une représentation d'une période beaucoup plus récente. Il faudra dans ce cas tenir compte d'un sens dérivé.

Vu la persistance du phénomène, il nous faut admettre que celui-ci est parti d'une puissante idée maîtresse, une idée de nature à s'appliquer à des représentations de caractère très divers. Cette diversité a à son tour donné lieu à une grande variété d'explications. Pour arriver à une compréhension correcte du *monosandalos*, il faut dès lors chercher une sorte de commun dénominateur.

La signification symbolique du pied avec, dans sa forme affaiblie, le soulier, est étroitement liée au phénomène du port d'une seule chaussure ou d'une seule sandale. Mais c'est là une autre histoire, sur laquelle nous ne nous attarderons que si nécessaire.

Etant donné la période extrêmement longue pendant laquelle le *monosandalos* apparaît, je me propose de diviser mon étude en deux parties. Je m'intéresserai en premier lieu à sa présence dans l'art antique. Plus tard, j'espère pouvoir étudier l'évolution du thème au Moyen Âge et à la Renaissance.

## INTRODUCTION

Mon intention n'est pas de dresser ici un catalogue de tous les endroits où l'on rencontre des *monosandaloi* dans la littérature et dans les arts figuratifs. Je voudrais adopter l'optique suivante. Jusqu'à présent, le problème a surtout été abordé d'un point de vue littéraire. On mentionnait bien parfois une

image, mais ce n'était pas la représentation en tant que telle qui était analysée, mais plutôt le récit qui l'entourait.

Actuellement, nous disposons de quelques nouvelles découvertes dans lesquelles apparaît un *monosandalos*, mais qui n'a pas encore été reconnu comme tel à la lumière du grand problème que nous avons soulevé ci-dessus.

Essayons à présent de pénétrer plus loin dans la problématique du port d'une seule chaussure à l'aide de ces nouvelles données, et en partant parfois d'une autre méthode. Cette autre méthode implique l'analyse d'une représentation en tant qu'œuvre d'art, sans pour autant négliger les indications littéraires<sup>2</sup>. Nous arriverons ainsi parfois à confirmer ce qui a déjà été présumé ici et là.

Ayons toujours ceci à l'esprit: il y a des pensées qui émeuvent l'homme, que ce soit sur le plan religieux, le plan érotique ou n'importe quel autre plan. Jadis, il ne pouvait les révéler, les communiquer à un autre homme ou à un dieu que grâce à quelques moyens, ou plutôt à un moyen unique, l'art, qui pouvait prendre différentes formes, de l'art figuratif à la littérature, voire à un art plus insaisissable, la musique. Cette expression pouvait même être maladroite.

Ceci veut dire que, lorsque nous voyons une image ou lisons un récit de l'antiquité, nous devons nous

Madame le docteur L. Byvanck-Quarles van Ufford a eu la gentillesse de lire le manuscrit et de me donner maints bons conseils. J'assume bien sûr l'entière responsabilité du contenu. Madame C. Warnant s'est chargée de la traduction du texte néerlandais en français. Je les remercie toutes deux de leur attention dévouée.

Ma reconnaissance va aussi aux instituts et musées suivants, qui ont eu l'amabilité de m'envoyer des photos: Archivi Alinari (Rome; *Fig. 4*), Abegg-Stiftung (Riggisberg; *Figs. 6-13*), Römermuseum (Augst; *Fig. 3*, photo E. Schultz), Musée Archéologique National (Athènes; *Fig. 2*), Musée du Louvre (Paris; *Fig. 14*, photo R.M.N.), Musée des Antiquités Nationales (Saint-Germain-en-Laye; *Fig. 5*). Les citations de l'Ancien Testament sont tirées de la traduction biblique suivante: La Bible, T.I., L'Ancien Testament, Bibl. NRF de la Pléiade, 1956.

<sup>1</sup> Reinach 1894, 64-67; Gruppe 1906, 912 n. 7; Amelung 1907, 113-135; Esdaile 1909, 1-4; Aigremont 1909, 7 e.s.; Heckenbach 1911, 48-49; Hauser 1913, 57-77; Deonna 1915, 344-345; ERE 1920, 475 e.s.; Hoffmann-Krayer I 1927, 922; Brunel 1934, 34-43; Hoffmann-Krayer VII 1935/36, 1308/9; Deonna 1935, 50-72, 54 avec littérature ancienne; Goossens 1935, 849-854; Kroll 1936, 152-158; Fraser 1938, 311 e.s.; Richter 1956, 32-35; Verhoeven 1956, 67-71; Deonna 1956, 156; Brelich 1955-1957, 469-484; Robertson 1972, 39-48.

<sup>2</sup> Deonna 1935, 53, l'a déjà signalé.

rendre compte qu'il ne s'agit que d'une enveloppe, une tentative d'exprimer une idée profonde, le cas échéant un mystère, sous une forme figurative. Pensons par exemple aux paraboles que le Christ utilise pour faire passer son message.

En fait, ce n'est qu'à l'époque de l'impressionnisme, de "l'art pour l'art", que la relation et l'union ancestrales entre art et religion ont été modifiées, sans pour autant disparaître complètement<sup>3</sup>.

En gardant bien ceci en tête, intéressons-nous à présent à une phialé en argent faisant partie du trésor de Rogozen découvert en 1985/86: la phialé d'Augè<sup>4</sup>. Tout comme il existe dans la littérature différentes versions d'un même mythe, on rencontre parfois différentes représentations d'un même événement d'une histoire. En analysant une telle représentation, force nous est de constater que, plus elle est exécutée avec art, plus elle est mûrement réfléchie. D'autre part, dans une représentation maladroite, la présence de petits détails apparemment sans importance est d'autant plus significative.

La phialé d'Augè de Rogozen nous fournit un exemple d'une oeuvre d'art particulièrement belle et bien pensée.

#### LA PHIALÉ D'AUGÈ

L'histoire d'Augè et d'Héraclès est connue dans les grandes lignes et dans différentes variantes, surtout avec l'épisode relatif à Téléphos, le fils issu de leur relation<sup>5</sup>. Augè était fille de roi. Son père, Aléos, régnait sur Tégée. Un oracle ayant prédit que ses fils périraient par la main d'un descendant de sa fille, il avait fait d'Augè une prêtresse d'Athéna, la condamnant ainsi à la virginité sous peine de mort. Or, à l'issue d'un banquet chez Aléos lors d'une fête en l'honneur d'Athéna Aléa, Héraclès, en état d'ébriété, s'en prit à elle sans se rendre compte qu'elle était la fille du roi, son hôte. Nous ne nous attarderons pas sur le reste du récit concernant l'histoire de Téléphos<sup>6</sup>. Il ne subsiste que des fragments de l'adaptation du mythe par les grands auteurs tragiques Sophocle et Euripide<sup>7</sup>. Plusieurs moments de l'histoire ont été immortalisés dans l'art. Concentrons-nous sur l'instant précis de l'assaut amoureux tel qu'il est représenté sur la phialé d'Augè (*Fig. 1*). Cette phialé date à peu près du milieu du 4<sup>e</sup> siècle avant J.-C.<sup>8</sup> Nous y voyons la scène suivante.

Héraclès est assis sur un rocher à droite, penché en arrière, les jambes en avant. Augè se tient devant lui, inclinée vers lui, la jambe droite en avant. Héraclès s'appuie de la main gauche sur le rocher.

Avec son bras droit levé presque à l'horizontale, il saisit d'un geste impérieux Augè par le manteau, là où celui-ci est drapé sur son épaule gauche. Elle lui enserme la main de sa main droite en la soutenant. Héraclès penche la tête vers Augè. Il a une barbe frisée bien fournie, une longue moustache et une chevelure également abondamment frisée. On y aperçoit en outre des feuilles d'une couronne de laurier. Il revient en effet d'un banquet. Dans toute la représentation, une différenciation nette des parties a été obtenue grâce à la dorure.

La composition est magnifiquement élaborée. Le bas de la jambe gauche d'Augè et la massue d'Héraclès à l'arrière-plan dessinent une ligne parallèle au bas de la jambe gauche d'Héraclès à l'avant-plan. Le buste des deux personnages et le bras gauche d'Héraclès suivent la même direction. Il y a deux points de contact entre Héraclès et Augè, là où ils se prennent la main et le bras droit dans une direction, qui est elle-même parallèle à la cuisse gauche d'Héraclès et au carquois à l'avant-plan.

Mais le point crucial c'est l'endroit où les figures se croisent, en bas à l'avant-plan. Héraclès pose son pied gauche dénudé sur le pied droit d'Augè. Et c'est précisément ce pied-là qui porte la seule sandale<sup>9</sup>.

Lorsque nous analysons la représentation, voici ce que nous constatons. Le thème du rapport amoureux est central. Augè, fille de roi et prêtresse, est profanée. Elle est presque entièrement dévêtue, ses cheveux flottent librement, et pourtant elle porte un

<sup>3</sup> Portal 1957, x, dit que la symbolique disparaît dès la Renaissance!

<sup>4</sup> Fol 1990, 195, 196.

<sup>5</sup> LIMC III, 45-51; Foucher 1983, 164 e.s.; Balty 1990, 53 e.s., 95.

<sup>6</sup> Bauchhenss-Thürdiedl 1971, 5, 10 e.s.

<sup>7</sup> Webster 1967, 238 e.s.; LIMC III sub Augè, 45, 46.

<sup>8</sup> Shefton 1987, 82-90, Pl. XIV; Catalogus Amsterdam 1989, No. 4, 56, 57 avec ill.; Byvanck-Quarles van Ufford 1989, 211-212 et 1990, 57-58, et fig. 1.

<sup>9</sup> Le problème de la sandale unique peut être interprété de trois manières différentes. Est-il important qu'un pied soit dénudé, comme on le souligne dans certains cas? On dit alors que la personne entre en relation avec la terre nourricière en lui apportant sa chaussure gauche (Aigremont 1909, 7 e.s., 62 e.s.; Verhoeven 1956, 68). On accorde également de l'importance au contact du pied nu avec la terre (Kroll 1936, 154 e.s.; Verhoeven 1956, 69 e.s.).

Ou est-ce justement le port d'une sandale unique qui est important?

La troisième possibilité est d'interpréter le fait comme la marque d'un déséquilibre (Verhoeven 1956, 71). Nous y revenons.

Dans le cas de la phialé d'Augè, notons que c'est précisément le pied droit chaussé qui est représenté à l'avant-plan. Voir également *ERE* XI, 1920, sub "Shoes and Sandals", 474-477, surtout 475; tout ce qui est à droite était considéré comme portant bonheur (Aigremont 1909, 5/6; Deonna 1935, 72).





Fig. 1. Phialé d'Augè et Héraclès de Rogozen, Mus. Nat. Hist., Sofia.

diadème, un collier et des boucles d'oreille, sans oublier un bracelet et un anneau de cheville à droite, et enfin cette seule sandale.

Nous pouvons dès lors tout de suite rejeter l'idée selon laquelle, sur cette représentation, elle serait simplement définie en tant que prêtresse, comme sur la peinture de Pompéi où elle se trouve à la source pour laver la robe d'Athéna lorsqu'arrive Héraclès<sup>10</sup>.

Augè apparaît sur la phialé dans les deux fonctions qu'elle exerce. Elle est à la fois prêtresse et fille de roi. La caractéristique d'une prêtresse en général est qu'elle va nu-pieds, que sa robe est défaite ainsi que ses cheveux<sup>11</sup>. En revanche, une fille de roi est entièrement vêtue et porte des bijoux<sup>12</sup>. Le professeur B.B. Shefton a déjà signalé que, dans l'art grec, les enfants royaux ont le plus souvent leur anneau de cheville autour de la jambe droite. C'est le cas d'Augè<sup>13</sup>. En outre, elle porte à ce pied droit une sandale, et c'est précisément sur ce pied qu'Héraclès pose son pied nu. Il indique ainsi qu'il

<sup>10</sup> LIMC III, 47, No. 12.

<sup>11</sup> Frazer 1938, 310, 311.

<sup>12</sup> Catalogus Amsterdam 1989, 31, où il est écrit à juste titre que les bijoux identifient Augè comme étant une princesse. Par contre, à la p. 56, nous lisons que les bijoux font d'elle une prêtresse, ce qui est inexact.

<sup>13</sup> Shefton 1987, 88 n. 5.

L'origine de la signification des anneaux de cheville est difficile à déterminer. Dans II Samuel I, 10, nous trouvons, dans le récit que l'Amalécite fait à David après avoir tué Saül à la demande de celui-ci: "... Puis je pris le diadème qui était sur sa tête et la chaînette qui était sur son bras; je les ai apportés ici à mon seigneur." (La Bible, traduction E. Dhorme, Bibl. NRF de la Pléiade, Tome I, 925). A la note 10, le diadème et la chaînette sont qualifiés d'insignes royaux. Telle est en effet clairement leur signification dans ce récit. Toutefois, le mot qui est utilisé dans le texte en hébreu pour désigner la chaînette autour du bras, à savoir *èts'ada*, a pour racine *ts'ad*, qui signifie *passus, gressus* (Mandelkern 1896, 1000; Gesenius 1977, 8e éd., 857; Koehler und Baumgartner 1967, 3e éd., I, 79. Il peut aussi s'agir d'une chaînette au pied).

Dans Nomb. 31, 50 et dans Jos. 3, 20, le terme n'a pas de signification royale. Il est en effet question de chaînettes que l'on porte au pied pour faire de petits pas féminins ou qui font partie d'un butin de bijoux en or donné en offrande au Seigneur. L'or est bien sûr quelque chose de spécial. Tout le monde n'en portait pas.

prend possession d'elle<sup>14</sup>. C'est là le point essentiel de toute la représentation.

Héraclès ivre est évidemment reconnaissable à sa peau de lion et à sa massue. Il est assis sur la peau de lion. Notons que la tête du lion est représentée à l'endroit le plus important, c'est-à-dire au centre de la phialé, dans un mouvement pivotant. On dirait que le lion, la tête tournée en arrière et la gueule ouverte, mord dans la cuisse droite d'Héraclès. La griffe gauche du lion est aussi posée sur cette cuisse. C'est une situation assez bizarre. Un lion mort est inoffensif. Est-ce là un signe de révolte vaine ou non intentionnelle? Je ne peux l'expliquer.

La massue est légèrement dissimulée. La partie supérieure est visible à côté de la jambe droite d'Héraclès. Le reste disparaît derrière le manteau d'Augè. Dans les moments d'ivresse d'Héraclès, sa massue, son arme redoutable, était souvent portée par un satyre ou servait de jouet à de petits éros. Ici, la massue est à moitié cachée<sup>15</sup>.

Flèche et arc ne sont pas à proprement parler des attributs d'Héraclès, bien qu'il soit quelquefois représenté avec eux. Curieusement, nous retrouvons un arc et un carquois au même endroit dans une autre représentation d'Héraclès et Augè: un miroir en bronze de la collection E.A. Stathatos du Musée national d'Athènes<sup>16</sup> (Fig. 2). On a déjà fait observer que, bien que la position des deux personnages se faisant face soit approximativement la même que sur la phialé de Rogozen, la tension, l'éthique sont complètement absentes sur le miroir. Ceci s'explique par le fait que le raffinement de la composition tel que nous l'avons décrit à propos de la phialé de Rogozen y fait totalement défaut. La présence d'un carquois et d'un arc au même endroit à l'avant-plan n'en est que plus surprenante<sup>17</sup>. Ceux-ci figuraient sans aucun doute sur le modèle original où cet événement dramatique a été représenté.

Le carquois et l'arc jouent donc un rôle, car rien n'a été représenté gratuitement, par pur souci de décoration. Tout comme la massue à moitié cachée, l'arc et le carquois déposés par terre indiquent qu'Héraclès est désarmé dans son ivresse. À l'inverse, on peut aussi dire que le fait qu'Héraclès est désarmé montre qu'il est ivre.

Par association avec Dionysos, l'ivresse d'Héraclès renvoie à un *hieros gamos*. Il ne s'agit pas simplement d'un viol d'une jeune fille par un ivrogne. C'est aussi le prélude à la naissance de Téléphos, l'ancêtre des souverains de Pergame, né d'une mère de souche royale, encore vierge au moment de son union, et engendré par un père héroïque dans une extase divine<sup>18</sup>.

La question est bien sûr de savoir pourquoi, sur la phialé de Rogozen, Augè ne porte qu'une seule

sandale dans ces circonstances. Cette particularité n'apparaît pas sur le miroir en bronze de la collection Stathatos. Augè n'y figure d'ailleurs pas nu-pieds, comme il sied à une prêtresse, mais chaussée d'une sandale à chaque pied. Elle n'est pas parée de bijoux, qui feraient plus particulièrement référence à son origine royale. Sa dualité n'est donc pas soulignée.

Il n'y a pas non plus de tête de lion, la gueule ouverte, au centre. Héraclès ne pose pas son pied sur celui d'Augè. On distingue par contre un élément nouveau, à savoir le bord ondulé qui indique que l'événement se passe dans une grotte. Cela peut être le signe qu'un mystère ou une initiation est en train de s'accomplir<sup>19</sup>.

En raison de toutes ces anomalies, nous ne devons pas trop nous inquiéter du fait que le phénomène de la sandale unique n'apparaît pas ici. D'autre part, il n'est pas nécessaire de passer en revue toutes les représentations connues de la rencontre entre Augè et Héraclès.

Répetons encore une fois ce qui caractérise Augè. Elle est prêtresse et donc vierge. Elle est aussi fille de roi. Ces deux éléments ne se contredisent pas. Mais elle couche – de gré ou de force, cela n'a pas d'importance – avec Héraclès, qui est lui-même sous l'emprise de Dionysos. En réalité, elle quitte, par un *hieros gamos*, l'état de jeune fille pour entrer dans la catégorie des femmes mariées.

Nous nous en tiendrons provisoirement à cette constatation et passerons à l'étude d'une autre

L'utilisation d'*êts'ada* dans le sens de signe de dignité royale se limite à II Sam. 1, 10 dans l'Ancien Testament. Une demande d'informations auprès du "Responsa Project" de la Bar-Ilan Univ. de Ramat-Gan, en Israël, où le mot apparaît encore à d'autres occasions, a débouché sur 14 textes concernant le Talmud de Babylone. Je remercie vivement le Prof. Dr. P.J. Tomson de m'avoir expliqué ces textes en hébreu. Force est toutefois de constater qu'on ne fait nulle part référence à un sens royal. La piste ne mène donc à rien de ce côté-là, si ce n'est que nous devrions admettre que l'Amalécite n'apporte qu'un butin de guerre à David.

Chez les hommes, les bracelets autour du bras sont le signe de leur rang (Lurker 1973, 27b).

<sup>14</sup> Aigremont 1909, 6, 42 e.s., la sandale d'Augè et le pied d'Héraclès symbolisent la vulve et le pénis. Nous retrouvons cette idée dans un tableau de Rembrandt conservé au musée Mauritshuis de La Haye. Le tableau a pour sujet "Suzanne et les vieillards". Suzanne pose ici le pied sur la pantoufle qu'elle a déjà enlevée, dans un geste de refus envers les vieillards.

<sup>15</sup> LIMC III, 47 No. 8, 48 No. 16 et 20.

<sup>16</sup> Oikonomos 1950, 133-140, Tav. XV; Oikonomos 1963, 73-77, Pl. X; LIMC III, 47; Shefton 1989, 83.

<sup>17</sup> LIMC III, 48 No. 21, une pièce de monnaie d'Antonin le Pieux qui représente la même chose.

<sup>18</sup> LIMC III, 51, sub "Kommentar"; Balty 1990, 53, 98.

<sup>19</sup> Oikonomos 1950, 139, 140; Daniélou 1964, 51; Meyer 1986, 211; Foucher 1983, 166; Balty 1990, 95, n. 414; sur la phialé de Rogozen, on peut voir des végétaux qui indiquent que la scène se déroule en plein air.



Fig. 2. Miroir en bronze, collection E.A. Stathatos, Mus. Arch. Nat., Athènes.

histoire où intervient un *monosandalos*. Elle est illustrée sur le plat en argent d'Achille, qui fait partie du trésor de Kaiser-Augst. Ce trésor a été découvert en 1962 dans des circonstances tout à fait sensationnelles.

#### LE PLAT EN ARGENT D'ACHILLE DE KAISERAUGST

L'oeuvre se date vers 330-345 après J.-C.<sup>20</sup> Selon une inscription au revers du plat, elle aurait été réalisée par Pausylippe de Thessalonique. La jeunesse d'Achille est illustrée sur la frise du plat. Le moment le plus important de l'histoire d'Achille est bien sûr représenté au centre. C'est ce médaillon qui nous intéresse (Fig. 3).

On y découvre la scène sur l'île de Scyros, lorsqu'Ulysse attire par la ruse Achille hors du gynécée de la cour du roi Lycomède. Commençons par analyser cette représentation.

Quatre personnages y sont répartis en deux groupes. Ils se tiennent debout sur un segment où sont représentées des armes. A gauche figurent deux femmes, ou du moins ce qui passe pour être deux femmes. A droite se trouvent deux hommes. Il s'agit, de gauche à droite, de Déidamie, la fille du roi, et d'Achille déguisé en femme, puis d'Ulysse et du joueur de trompette, Agyrte ou Diomède. La légende est bien connue. Achille doit être contraint de participer à la guerre de Troie car, d'après un oracle, il sera impossible de gagner sans lui. Mais il vit, caché par sa mère Thétis, dans le gynécée de la cour de Scyros, pour éviter que ne s'accomplisse la prédiction selon laquelle il mourra dans la bataille pour la conquête de Troie.

<sup>20</sup> Instinsky 1971, 3-18; Byvanck-Quarles van Ufford 1973, 119, Pl. XLIX, fig. 113; *LIMC* I, 1, 1981, 55-65, No. 4 avec litt., No. 172; Cahn und Kaufmann-Heinimann 1984; Kaufmann-Heinimann und Furger 1984, 60-65, No. 63, Abb. 89; Schefold und Jung 1989, 127 e.s., Abb. 113.





*Fig. 3. Médaillon du plat en argent d'Achille, Röm. Mus. Augst.*

Ulysse et Diomède arrivent incognito à la cour. Précisons que, sur cette représentation, seul Ulysse est déguisé en marchand, le trompette est armé de pied en cap. Ils apportent des cadeaux pour les femmes. Des armes sont dissimulées sous les présents. Ulysse fait retentir le cor de guerre. Dès le premier son, Achille sort de son rôle de femme et se précipite sur les armes. C'est précisément cet instant qui est représenté dans une scène pleine d'impétuosité. Nous pouvons d'emblée l'affirmer: il s'agit d'une situation de crise.

Comment ce "moment suprême" a-t-il été rendu par l'artiste? Celui-ci a tout d'abord veillé à maintenir les deux groupes séparés, sauf au point d'intersection entre le bouclier levé d'Achille et le buccin du trompette. Les deux figures féminines sont serrées l'une contre l'autre, parce que Déidamie tente de retenir Achille. Les deux figures masculines sont également associées l'une à l'autre, mais dans une moindre mesure. Elles forment en effet moins une unité. Mais c'est entre les deux groupes que l'on trouve un vide éloquent. Il marque une césure entre deux mondes, au-dessus desquels semble jaillir une étincelle représentée par l'appel de la trompe et la réponse du bouclier levé. On pourrait s'imaginer entendre le bruit du métal qui s'entrechoque. Le bouclier que tient Achille cache en partie la trompe, ce qui focalise l'attention sur lui. Sa tête est encore tournée en arrière vers Déidamie, qui agrippe son bras droit pour le retenir. Pour le reste, rien ne vient recouper la figure d'Achille. Il est aussi le personnage le plus grand et donc le plus important. L'orientation de la lance dans sa main droite et de son bouclier, tout indique toutefois son départ avec les guerriers. Assez curieusement, eux aussi, tout comme Achille, regardent en arrière vers la gauche, alors que leurs corps, et certainement le bras droit d'Ulysse, tendent vers la droite. C'est un ordre d'accompagnement. Le simple fait que les trois têtes esquissent un même mouvement vers l'arrière crée déjà un lien entre elles. Déidamie est la seule qui a la tête tournée vers la droite. Il ne lui reste qu'à suivre des yeux le départ des trois hommes. Il y a à nouveau ici une opposition. Ceux qui partent regardent en arrière. Celle qui reste a les yeux fixés vers l'avant, vers l'avenir et ce qu'il apportera. Le mouvement des vêtements de Déidamie rappelle encore avec quelle hâte elle est accourue. Mais son buste est incliné vers l'arrière.

Signalons encore que les deux "femmes" se tiennent sur un sol plus ou moins horizontal, tandis que les deux hommes posent chacun le pied gauche sur un bloc rocheux, dénotant ainsi clairement un mouvement vers la droite. C'est aussi une manière de marquer la différence entre la douceur du gynécée de la cour et la rudesse du monde extérieur<sup>21</sup>.

Dans cette scène mouvementée, il est néanmoins un petit détail qui joue un rôle important. Achille perd la chaussure de femme qu'il portait au pied droit. Nous la voyons encore voltiger dans le segment à côté des armes. La présence de cette chaussure vide a déjà été relevée antérieurement, mais on ne lui a pas accordé d'autre valeur que celle de montrer qu'Achille est déjà en train d'enlever ses vêtements féminins<sup>22</sup>. Je pense qu'il s'agit là d'une explication trop superficielle, surtout dans une composition qui a été si minutieusement élaborée. Pourquoi un détail aussi futile que cette petite chaussure à peine gravée aurait-il été placé au milieu de ces grandes figures s'il n'avait pas une signification spéciale?

Le raisonnement tient d'autant mieux que nous connaissons une autre représentation d'Achille saisissant des armes et levant un bouclier où la même particularité se retrouve. Son soulier droit est ici disposé à côté de son pied. L'oeuvre en question est une mosaïque de la seconde moitié du IV<sup>e</sup> siècle après J.-C. qui se trouve à Kourion, dans l'île de Chypre<sup>23</sup>. Nous pourrions dès lors dire qu'il a dû y avoir une source littéraire qui indiquait qu'à cette occasion, Achille commençait par se défaire de sa chaussure droite. Mais l'action n'illustre pas ici le fait qu'Achille ôte ses vêtements de femme, mais bien qu'il se précipite sur les armes et qu'il part.

Essayons à présent de mieux saisir ce qui se passe réellement dans cette scène représentée sur le plat d'Augst<sup>24</sup>. Achille se trouvait à la cour, déguisé en femme, afin de sauver sa vie. Déidamie, la fille du roi, était sa bien-aimée. Un autre personnage, Ulysse, le contraint par la ruse à franchir la césure qui le sépare du monde, où la mort l'attend. Ce passage d'Achille est rendu par l'expression de sa réaction typiquement masculine au son du buccin, son habit de femme glissant alors de son épaule.

Mais cet appel signifie en fait plus que cela. Le son du buccin tire Achille du sommeil dans lequel se trouvait sa virilité. Il ressuscite en tant qu'homme d'une mort symbolique. Bachofen formule la chose comme suit: "the brazen trumpet ... brings forth Achilles from his hiding place among the women of Scyros, where his manhood lay hidden and unknown until the day when, like a son emerging from the womb, it rose to the light"<sup>25</sup>.

<sup>21</sup> A propos de ce motif, voir Brown 1972, 381/382, Pl. 79, fig. 3, 4, où il apparaît combiné à un motif de Polygnote, à savoir avec une main sur la hanche et une main qui soutient la tête.

<sup>22</sup> Instinsky 1971, 8; *LIMC* I, 1, 1981, 61, No. 131, 63, No. 148; *LIMC* I, 2, 70, 72, No. 131; Cahn und Kaufmann-Heinimann 1984, Taf. 176, 2; Michaelides 1987, 32.

<sup>23</sup> Michaelides 1987, 32/33, No. 33, Pl. XIV.

<sup>24</sup> Kenner 1970, 141 e.s.

<sup>25</sup> Bachofen 1972, 42.

Dans son livre sur le *mundus inversus*, Madame H. Kenner fait remarquer qu'une des expressions les plus choquantes de l'"inversion" est en premier lieu le jeu de l'amour entre animaux qui ne s'accordent pas, entre un âne et une lionne par exemple<sup>26</sup>. Elle classe cependant aussi dans ce groupe, puisqu'il s'agit toujours du domaine de l'éros, le changement de sexe, le passage de l'état d'homme à celui de femme et inversement. Celui-ci est rendu, sous une forme atténuée, par le changement de vêtements. Elle signale que ce phénomène se produisait habituellement à l'occasion d'une rupture dans la vie de l'être humain, notamment lors de grandes fêtes comme les noces, les funérailles, la fête des moissons, le nouvel an ou des festivités qui marquent en général la fin d'une période et le début d'une nouvelle ère. Mais le changement de sexe signifie aussi l'entrée dans le royaume des morts. Ainsi, lorsque Thétis déguise Achille en femme, commence pour celui-ci une nouvelle période, provisoire il est vrai, de son séjour au pays des vivants. Mircea Eliade a déjà fait observer que plusieurs moments de la vie d'Achille pouvaient être interprétés comme des épreuves initiatiques. Selon lui, le fait de vivre déguisé en jeune fille parmi les jeunes filles est, entre autres, une initiation primitive à la puberté<sup>27</sup>.

Sa métamorphose suivante, de l'état de femme à celui d'homme au début de la période qui, par la suite, le mènera à sa mort, est rendue de façon subtile. Il ne porte plus qu'une seule chaussure. Ce qui est exprimé ici, c'est cette discordance, cette incapacité à se tenir droit sur ses deux jambes, c'est ce passage d'un monde auquel il n'appartient déjà plus à un autre monde dans lequel il va entrer. Ceci était du reste déjà illustré par la scission de la composition en deux groupes. C'est un "rite de passage". Il ne s'agit toutefois pas ici d'une initiation à la puberté, car Achille a déjà un fils de Déidamie, Néoptolème. Achille va désormais au-devant de la mort en guerrier<sup>28</sup>. Nous aussi connaissons l'expression moderne "avoir un pied dans la tombe".

Voilà ce qui, d'après moi, est exprimé dans cette représentation. Tel est ici le sens du port d'une chaussure unique: un revirement dans la vie d'Achille. Nous avons vu plus haut que, chez Augè aussi, il s'agissait d'un tournant dans son existence, à savoir le passage de la virginité au statut de femme mariée. Ces éléments suffisent déjà pour conclure qu'en ce qui concerne le port d'une seule chaussure, ce ne sont pas les sujets proprement dits qui importent, mais bien le passage qu'ils représentent.

Un rite de passage se compose de trois phases, une séparation, une période marginale et une incorporation. Van Gennep les appelle *preliminal rites*, *liminal (or threshold) rites* et *post-liminal rites*<sup>29</sup>.

Dans la phase intermédiaire, le candidat n'est rien, ne fait partie de rien, il est éloigné de la vie sociale, souvent enfermé dans l'isolement, il n'est alors considéré ni comme un homme, ni comme une femme, parfois comme un bisexuel<sup>30</sup>. Cet isolement est ce que subissait Achille à la cour de Lycomède et ce qu'Augè vivait dans le temple d'Athéna.

#### LA FRESQUE DE POMPÉI AVEC L'APPARITION DE JASON DEVANT PÉLIAS

Après avoir consacré les chapitres précédents à deux oeuvres d'art découvertes il n'y a pas si longtemps, nous abordons à présent un exemple de *monosandalos* connu de longue date et qui a déjà fait couler beaucoup d'encre: la représentation où Jason apparaît devant Pélias avec un seul pied chaussé, la fresque de Pompéi (*Fig. 5*).

Cette rencontre rend un moment crucial. D'après Pindare, Pélias avait été averti par un oracle de se méfier de celui qui paraîtrait devant lui avec un seul pied chaussé. Il allait lui ravir la royauté. Pélias s'était en effet emparé du pouvoir à Iolcos en chassant du trône le père de Jason. Pélias reconnaît dans l'arrivée de Jason, qui ne porte qu'une seule sandale, l'annonce de l'accomplissement du destin qui lui a été prédit par l'oracle.

La différence avec les deux oeuvres d'art dont il est question plus haut est que, dans celles-là, nous devons déduire nous-mêmes de la représentation que l'acteur principal du récit n'avait qu'un seul pied chaussé. Dans le mythe de Jason par contre, la source littéraire, à savoir l'ode de Pindare de 462 avant J.-C., est de première importance. Il y est clairement dit que l'apparition d'un *monosandalos* forme le noeud du récit. Elle déclenche tout le développement de l'histoire à travers la réaction de

<sup>26</sup> Kenner 1970, 102 e.s., 151.

<sup>27</sup> Mircea Eliade 1976, 237; Balty 1990, 92, 93; Dans l'A.T., le thème du changement de vêtements apparaît pour désigner le début d'une nouvelle période. Dans Genèse 35,2, il est dit, après que Dieu eut commandé à Jacob d'aller à Béthel: "Jacob dit à sa maison et à tous ceux qui étaient avec lui: *Enlevez les dieux étrangers qui sont au milieu de vous, purifiez-vous et changez vos vêtements.*" On relève ici deux caractéristiques d'une *separatio*: se débarrasser de l'ancienne poussière et remplacer ses vieux vêtements. Le message de Jacob aux siens n'est pas "soyons bien propres pour partir en voyage", mais a un sens très profond: "à partir de maintenant, nous allons au-devant d'une vie nouvelle toute différente."

<sup>28</sup> Le sort avait en effet décidé qu'Achille mourrait au combat. Le "sort" reste toujours souverain. Goossens 1935, 850.

<sup>29</sup> Gennep, van 1993, 21; Pour une étude plus approfondie dans ce domaine, voir Bianchi 1986.

<sup>30</sup> Turner 1967, 94.





Fig. 4. Moulage d'une statuette en bronze de Mercure, mus. d. Ant. Nat., Saint-Germain-en-Laye.

Pélias qui tente en vain d'échapper à son destin. C'est précisément parce que nous avons affaire ici à une source du Ve siècle avant J.-C. que, dans toutes les tentatives entreprises pour percer le sens d'un *monosandalos* en général, on s'est raccroché à ce récit de Jason<sup>31</sup>. Aigremont a déclaré en 1909 que la fresque de Pompéi avec l'apparition de Jason devant Pélias était le seul exemple de *monosandalos* connu jusqu'alors dans les arts figuratifs, affirmation qui a ensuite été reprise par W. Kroll<sup>32</sup>. C'était certes là une petite erreur. En 1894, Reinach faisait déjà mention d'une statuette en bronze représentant Mercure en *monosandalos*, laquelle avait été découverte à Saint-Révérien (Nièvre). En 1885, celle-ci faisait partie de la collection Méline<sup>33</sup> (Fig. 4).

Ni dans le cas de l'histoire d'Héraclès et d'Augè, ni dans celui de l'histoire d'Achille, lorsqu'il est contraint par une ruse d'Ulysse de quitter la cour de Lycomède, nous ne disposons d'une source littéraire qui indique le port d'une seule sandale. Il n'empêche que, comme en témoigne la description de Pindare, le phénomène du *monosandalos* était connu au Ve siècle avant J.-C. Il nous faut toutefois

ajouter qu'on expliquait de diverses manières comment Jason avait perdu une sandale. En route pour le palais de Pélias, il aurait oublié de remettre sa sandale gauche après avoir traversé la rivière Anauros. Il aurait porté Héra pour l'aider à traverser la rivière et celle-ci, en colère contre Pélias, aurait fait en sorte qu'une de ses sandales reste prise dans la boue. En bon hôte, Pélias aurait donné une de ses propres sandales à Jason.

Dans la littérature, on trouve encore d'autres exemples de guerriers ne portant qu'une seule chaussure, et ce chez différents peuples. Toutes sortes d'explications ont été échafaudées à ce propos, explications que Deonna qualifie à juste titre d'"invraisemblables"<sup>34</sup>. On sait également que Didon et Médée ne portaient qu'une seule chaussure au moment de leur sacrifice, ce qui peut être considéré comme un acte rituel.

A mon avis, Deonna constate aussi très justement que le port d'une seule chaussure est un rite qui n'était déjà plus compris par Pindare, Euripide et Thucydide. Il est dès lors d'autant plus étonnant que le phénomène du *monosandalos* continue d'apparaître dans les arts figuratifs jusqu'à la Renaissance. Les artistes doivent donc l'avoir compris et avoir cru que son sens serait évident pour les spectateurs.

Voilà pourquoi il est nécessaire que nous nous penchions à nouveau sur l'oeuvre d'art proprement dite, en l'occurrence la fresque de Pompéi, pour essayer de l'analyser. On la date des environs de 10 après J.-C.<sup>35</sup>

Bien que toute l'histoire tourne en fait autour de deux personnes, Jason et Pélias, la scène de leur rencontre est composée de trois groupes comptant respectivement un, deux et trois personnages. En bas à gauche se trouve un serviteur accompagné d'un taureau que Pélias était sur le point d'offrir en sacrifice à Poséidon. En bas à droite, Jason, avec à ses côtés une des filles de Pélias, se tient près d'une

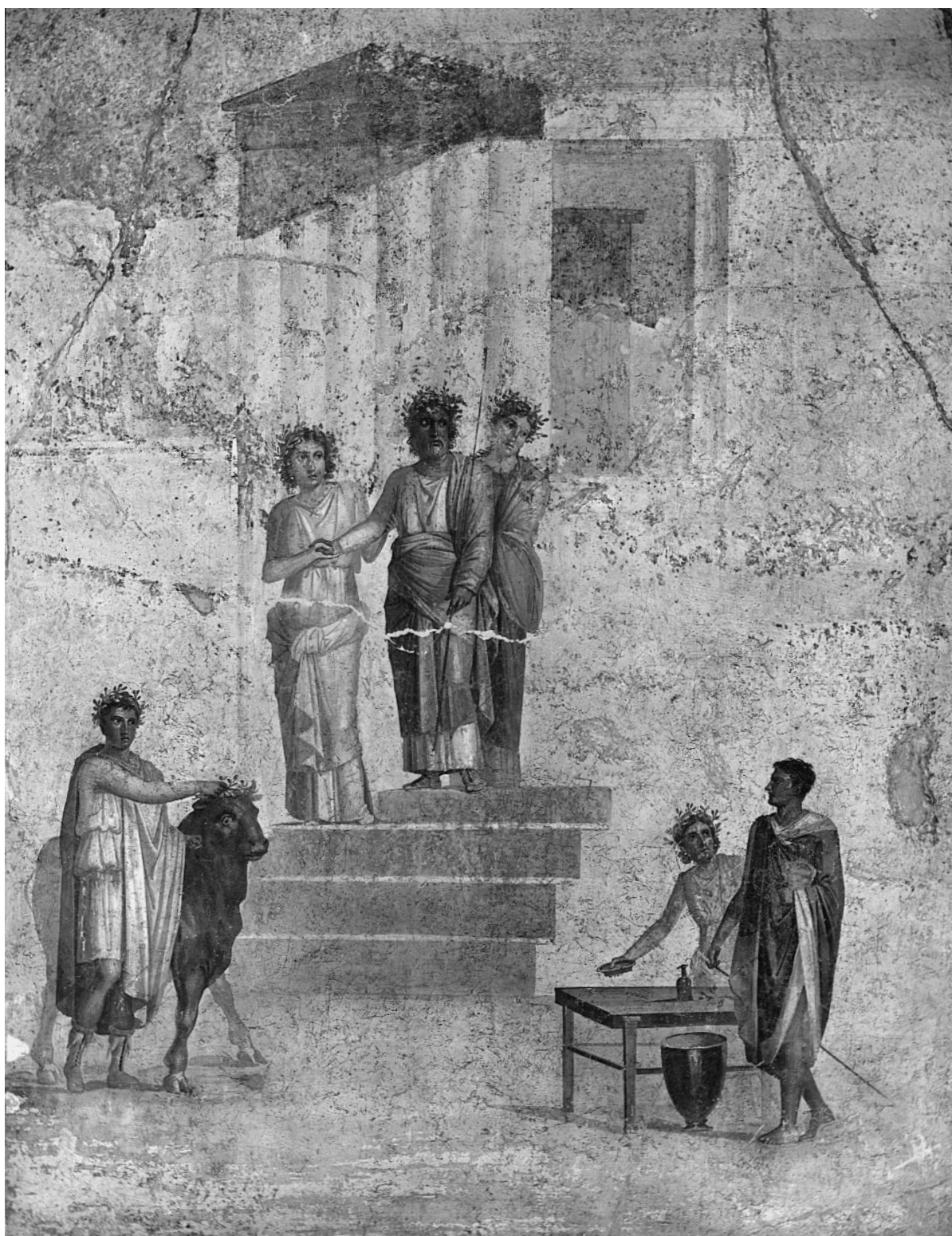
<sup>31</sup> Voir note 1 supra, surtout Brunel 1934, 34-43; *LIMC* sub Jason, notamment 629, 630, 636, 638; Schefold und Jung 1989, 19 e.s. Abb. 7.

<sup>32</sup> Aigremont 1909, 43; Kroll 1936, 155.

<sup>33</sup> Reinach 1894, No. 48, 64-67. Les erreurs se succèdent. La statuette que Reinach décrit dans son catalogue du musée de Saint-Germain-en-Laye n'est qu'un moulage. Il l'indique à l'aide d'un astérisque. Personne ne s'en est jamais rendu compte, moi non plus, jusqu'à ce qu'on me l'ait expliqué au musée. Deonna 1956, 156, parle tout simplement de la statuette en bronze du musée de Saint-Germain-en-Laye. Le musée n'a pourtant jamais possédé qu'un moulage. L'original est introuvable. Weisbach 1942, 116, désigne plusieurs statuettes en bronze du musée comme étant des *monosandaloi*.

<sup>34</sup> *ERE* 1920, II, 475 e.s.; Goossens 1935, 849-854; Deonna 1935, 55 e.s.; Verhoeven 1956, 67 e.s.; Frazer 1938, 311 e.s.

<sup>35</sup> Schefold und Jung 1989, 22, la représentation peut être tirée d'un livre d'illustrations des environs de 310 avant J.-C.



*Fig. 5. Jason devant Pelias, fresque de Pompeï, Mus. Nat., Naples.*



table pour faire une libation. Pélidas est représenté au-dessus de ces deux groupes. Il apparaît en haut d'un escalier, accompagné de deux autres de ses filles. Ce trio est le plus important, non seulement numériquement mais aussi par son emplacement, puisqu'il forme le sommet d'un triangle.

Le plus étrange, c'est qu'il ne se passe rien en fin de compte. Tout le monde est figé dans un geste arrêté. Les regards fusent néanmoins de toutes parts vers Jason. Il est le seul dont la tête est représentée de profil. Il regarde fixement devant lui. Tous les autres personnages ont la tête tournée de 7/8ième. Le blanc de leurs yeux est rehaussé d'un accent vif et scintillant. Ils ont tous la tête ornée d'une magnifique couronne de feuilles. Richement parés, ils étaient tout à la joie du sacrifice lorsque soudain apparaît discrètement ce personnage, dont on voit à peine qu'il ne porte qu'une seule sandale.

C'est comme si tout le monde avait le souffle coupé. Tout allait si bien, et voilà tout à coup, en chair et en os, l'annonce de l'implacable destin. C'est un moment de tension intense, sans le moindre geste emporté. Seule la composition triangulaire indique que l'on a atteint un paroxysme. Du point de vue de la composition, l'accent est mis sur le personnage de Pélidas, richement vêtu, mais c'est pourtant Jason qui attire toute l'attention vers lui. Même la fille de Pélidas qui se trouve à ses côtés se penche en avant pour le regarder. En fait, Pélidas ne peut même pas voir cette sandale unique, pivot de toute l'histoire, à cause de la table derrière laquelle se tient Jason.

Ainsi y a-t-il quand même un mouvement violent, non pas physique mais mental. La tension est à son comble. Jusqu'à présent, l'interprétation a toujours été centrée sur le malheur que l'arrivée de Jason représentait pour Pélidas, et non sur le fait que Jason ne portait qu'une seule sandale. Ce n'était qu'un point de repère. C'est également le cas ici, dans cette fresque. L'accent est toutefois bel et bien mis sur un tournant dans l'histoire.

La suite du mythe est bien connue. Pélidas est prêt à céder son trône si Jason lui apporte la toison d'or. A première vue, ceci n'est qu'une mission dangereuse que Pélidas confie à Jason dans le but de se défaire de ce dernier. En réalité, il s'agit symboliquement d'un processus d'initiation à la royauté, sous forme de sublimation. Jason devra vaincre ses propres faiblesses pour pouvoir devenir un roi juste<sup>36</sup>.

Aucune attention n'a jusqu'à présent été accordée au fait que Jason a d'abord dû traverser une rivière avant d'arriver chez Pélidas. C'est pourtant très important, car cela signifie à la fois le franchissement d'une limite et une purification par l'eau. Il s'agit de la phase *préliminale* d'un rite de passage, la *separatio* de l'ancienne existence.

D'après Diel, Jason, *monosandalos*, serait aussi considéré comme un boiteux. La sandale manquante serait le symbole d'une âme mal protégée, en raison de son éducation chez le centaure Chiron.

Bien que je considère que la comparaison d'un *monosandalos* avec un boiteux est en principe correcte, je crois que l'explication du port d'une chaussure unique est à la fois autre et plus simple. Deonna a déjà constaté que le fait de ne porter qu'une seule chaussure a une raison rituelle: "Cette tenue est donnée aux dieux chtoniens, à leurs adeptes, aux initiés de leurs cultes, aux officiants de leurs sacrifices, aux défunts. Elle est usitée quand on évoque ces dieux dans les rites magiques, funèbres, agraires. Elle concerne les puissances souterraines que sont Dionysos infernal, les divinités d'Eleusis, Asklepios, la Terre, Hécate. Pour cela, elle est aussi un présage de mort, ..." <sup>37</sup>.

Cette prise de position éclaircissait déjà beaucoup de choses, tout en éliminant plusieurs explications banales. Mais vu les découvertes récentes, cette interprétation uniquement axée sur les puissances chtoniennes ne suffit plus, aussi correcte et sensée soit-elle dans bien des cas. Elle ne convient certainement pas pour Augè, car chez elle il s'agit d'une initiation au statut de femme mariée. Pour Achille, c'est un passage à l'état de guerrier et par conséquent à la mort. Chez Jason, c'est l'initiation à la royauté.

Nous pouvons cependant relever un commun dénominateur dans tous ces cas. Partout, il s'agit d'un tournant dans l'histoire. Nous avons pu le constater en analysant les oeuvres d'art dont il est question plus haut. Chaque fois, une nouvelle situation apparaît. Un motif qui est employé dans des cas aussi différents et, comme nous le verrons, sur un aussi long laps de temps, ne peut avoir qu'une signification générale très simple. Selon moi, il est seulement la marque d'une incapacité de se tenir droit sur ses deux jambes. Ceci veut dire que, par une transition, on quitte une situation donnée pour se retrouver dans une situation nouvelle. C'est un "rite de passage", une mort symbolique afin de ressusciter. Il en existe d'autres moyens d'expression. Ce passage peut aussi être représenté par une blessure à un seul pied ou par une claudication<sup>38</sup>.

Pour une blessure au pied, je renvoie déjà brièvement à la fresque dans l'adyton de Xeste 3 à Akrotiri, à Théra. Une jeune fille s'y blesse au pied en cueillant des crocus au cours d'un processus

<sup>36</sup> Deonna considère la tenue de Jason comme celle d'un "officiant des rites chtoniens", parce qu'il est pour Pélidas un messager annonçant la mort de celui-ci, Deonna 1935, 67; Roux 1949, 173-175; Diel 1966, 171-182.

<sup>37</sup> Deonna 1935, 66.

<sup>38</sup> Brelich 1955, 469 n. 1.



d'initiation<sup>39</sup>. Pour Héphaïstos également, la claudication ou la blessure à un pied est le signe de son initiation au métier de forgeron<sup>40</sup>. Citons encore une description de la manière dont Lycurgue se coupe le pied, tandis qu'il existe une représentation de Lycurgue en *monosandalos* sur le cratère de Derveni<sup>41</sup>. Lorsque, dans l'Ancien Testament, Jacob reçoit le nom d'Israël, il se met à boiter<sup>42</sup>. Lorsque, dans le récit d'Apulée sur l'Âne d'or, Lucius veut devenir prêtre d'Osiris, une vision nocturne lui révèle que c'est le prêtre qui marche en boitant qui sera son guide<sup>43</sup>. Mais intéressons-nous d'abord à présent à un autre exemple de *monosandalos* dans une oeuvre d'art qui a été mise au jour il y a très peu de temps.

#### LA TENTURE DE DIONYSOS DE LA FONDATION ABEGG

Fin 1985, plusieurs fragments d'un tissu d'une qualité très particulière ont fait leur apparition dans le commerce international de l'art. Il s'agissait de découvertes provenant sans doute d'une tombe égyptienne. Il s'est très vite avéré que toutes ces pièces faisaient partie d'une seule et même grande toile, une tenture. Celle-ci se compose d'un fond de lin qui sert d'arrière-plan à des figures disposées chacune dans une arcade. La représentation est faite de laine de toutes couleurs appliquée sur le lin. Les dimensions de l'oeuvre sont de 730 sur 220 cm.

Grâce à l'extraordinaire savoir-faire technique dont on dispose à la Fondation Abegg, il a été possible de réunir les différentes parties sous la direction de Madame M. Flury-Lemberg<sup>44</sup>. Pour ce faire, on est entre autres parti du constat que le climat d'une tombe agit tout à fait différemment sur la laine et sur le lin. C'est ainsi que l'on a pu établir la succession des fragments.

Nous attendons maintenant avec impatience la publication de cette tenture par le Prof. Dr. Dietrich Willers de Berne. Il a déjà consacré plusieurs publications à cette tapisserie<sup>45</sup> (Fig. 6). D'autres auteurs l'ont également traitée dans leurs écrits<sup>46</sup>. En général, on s'accorde pour dire que la scène représentée est une initiation aux mystères de Dionysos. Mais loin de moi l'idée de m'étendre ici sur les mystères de Dionysos.

Disons tout de suite pourquoi je crois devoir reprendre cette oeuvre dans mon étude. Il m'apparaît que, jusqu'à présent, un des personnages n'a pas été interprété correctement. Il s'agit de la troisième figure à partir de la gauche, une jeune femme (Fig. 9). Elle est partiellement vêtue d'une courte tunique rouge. De la main droite, elle écarte le vêtement de son sein droit. Elle porte une écharpe bleue sur l'épaule gauche. Sa jambe droite est

entièrement dénudée. Un manteau pourpre pend devant sa jambe gauche et derrière sa jambe droite nue<sup>47</sup>. Son pied gauche est glissé dans une petite chaussure rouge<sup>48</sup>. C'est une *monosandalos*!

A cause de la nudité de sa jambe, on l'a prise pour Mystis, la nourrice de Dionysos<sup>49</sup>. La personne représentée à gauche d'elle, donc placée à sa droite, une matrone, est, elle, considérée comme celle qui est initiée, sous prétexte qu'elle est la seule à porter un nimbe bleu<sup>50</sup>.

Vu l'argumentation développée aux chapitres précédents, je me permets d'affirmer d'emblée que c'est en fait la jeune femme qui est initiée ici. Cette constatation va me conduire à changer de méthode. Mon propos sera axé sur la clarification du rôle des autres personnages afin d'arriver ainsi à une explication acceptable. Mon intention n'est certes pas d'empiéter sur la publication du Prof. Dr. Willers en abordant in extenso l'ensemble de la tenture. Je m'en tiendrai donc à une description sommaire. C'est en effet la *monosandalos* qui m'intéresse. Voilà pourquoi il me faut d'abord réfuter l'interprétation qui a été faite de la matrone.

Pour être complète, je dois toutefois commencer par considérer la représentation sur la tenture dans son ensemble. Nous y découvrons huit personnages, chacun dans une arcade. Il y avait peut-être à l'origine deux figures supplémentaires du côté droit, du moins si l'on part du principe qu'un nombre égal de personnages étaient disposés de part et d'autre du centre formé par le couple Ariane – Dionysos<sup>51</sup>.

<sup>39</sup> Marinatos 1984, 79 e.s.; Marinatos 1993, 208 e.s.

<sup>40</sup> Delcourt 1957, 136: "... Héphaïstos a les tendons coupés ou les pieds retournés, stylisation littéraire des tortures infligées à l'initié, ..."; Eliade 1959, 237.

<sup>41</sup> Deonna 1935, 61, 62; Bruneau et Vatin 1966, 405; Robertson 1972, 39 e.s.; LIMC VI,1, 317, VI,2 Pl. 157,I,4.

<sup>42</sup> Genèse 28-32.

<sup>43</sup> Apulée Mét. XI, 27.

<sup>44</sup> Flury-Lemberg und Willers 1987, 3-14; Flury-Lemberg 1988, 364-381, fig. 772-786.

<sup>45</sup> Je remercie de tout coeur le Prof. Willers d'avoir eu la gentillesse de m'envoyer des exemplaires de ses publications antérieures; Willers, Akten Kongress 1988, 1990, 533; Willers 1988, 76-79; Willers 1992, 141-151; Willers 1993, 11-119.

<sup>46</sup> Balty 1990, 33, n. 92, 40 e.s., 89, 90, Pl. XI, 2, XIV, 1, XV, 1, XVI, 2; Bowersock 1993, 52, 53, Pl. 10, 11; Rudolph 1993, 1, 21 n. 3.

<sup>47</sup> Madame Balty fait erreur lorsqu'elle déclare: "... l'artiste qui a réalisé la tapisserie n'a pas compris, que le modèle initial comportait en fait une tunique longue, ...". Balty 1992, 40. On ne se trompait pas si facilement autrefois. La signification de ce détail a échappé à Madame Balty, voir p. 189 ci-dessous.

<sup>48</sup> On pourrait consacrer toute une étude rien qu'au port de petites chaussures rouges.

<sup>49</sup> Balty 1990, 40; Willers 1992, 147.

<sup>50</sup> Balty 1990, 41, 90; Willers 1992, 147; Bowersock 1993, 53.

<sup>51</sup> Willers 1992, 147. De plus il est possible qu'il y ait eu un personnage entre la matrone et la *monosandalos*. Le Prof. Dr. D. Willers a été si aimable d'attirer mon attention là dessus pendant ma dernière visite à la Fondation Abegg. Il m'a montré que les

On pourrait s'imaginer qu'il s'agit d'une simple juxtaposition de figures isolées. On pourrait se dire que rien ne se passe par absence de mouvement, de lien entre les personnages. Mais ce n'est pas le cas. Car il existe bien un rapport subtil entre les êtres représentés, exprimé chaque fois par un petit détail indiquant la direction dans laquelle une personne se penche ou tourne la tête. Aucune action n'est ici mise en scène de manière dramatique, mais des indices suggèrent toutefois que les personnages forment un groupe. Un léger mouvement ondulant parcourt la compagnie. On dirait une procession qui se déplace lentement de la gauche vers la droite. Voyons ce qu'il en est.

La figure à l'extrême gauche indique la direction. Il s'agit d'un vieil homme portant un fléau sur l'épaule droite<sup>52</sup> (Fig. 7). Il marche vers la droite, il regarde à droite. On n'observe aucune torsion de son corps. Il en va autrement de sa voisine, la matrone (Fig. 8). Elle se déplace aussi vers la droite, mais elle regarde en arrière vers son voisin. Elle tient une couronne dans la main droite, une coupe dans la main gauche. Elle est vêtue de rouge et de bleu des pieds à la tête. Elle a un nimbe bleu. Après la matrone vient la *monosandalos* déjà décrite plus haut. Elle est immobile et a les yeux fixés droit devant elle d'un air songeur. La progression vers la droite reprend avec le personnage suivant, Pan, qui joue de la syrinx (Fig. 10). Bien que ses pieds de bouc le montrent déjà, c'est surtout sa peau de faon verte tachetée flottant au vent, une *nébride*, qui marque un mouvement vers la droite. Son buste est représenté de face. Sa chevelure est ceinte de rameaux verts. Lui aussi regarde en arrière, mais vers la *monosandalos*. Il porte un nimbe jaune pâle bordé de rouge. Le jaune désigne certainement ici l'or.

L'arcade suivante abrite Ariane (Fig. 11). Elle est nue, mais parée de nombreux bijoux. Un manteau pourpre flotte dans son dos. Ses jambes n'ont pas été conservées. Sa tête est également inclinée vers la gauche. Elle baisse les yeux d'un air rêveur. Elle a un nimbe identique à celui de Pan. Elle tient une couronne dans sa main droite abaissée et une grenade dans sa main gauche levée.

Vient ensuite Dionysos (Fig. 12). Il ne bouge pas. Il est debout dans une attitude de repos, la jambe gauche croisée sur la jambe droite. Dans sa main droite baissée, il tient un kantharos contenant du vin qu'il est en train de verser<sup>53</sup>. Il ne peut donc pas marcher. En bas à droite se trouvent les restes des pattes arrière vertes tachetées d'une panthère, qui est sans aucun doute en train de boire le vin qui coule du kantharos. Le bras gauche de Dionysos est levé, sa main repose sur sa tête ceinte de pampres et entourée d'un même nimbe jaune. Deux torsades

de cheveux ondulés pendent devant ses épaules jusque sur sa poitrine<sup>54</sup>. C'est une attitude empruntée à l'Apollon Lykeios de Praxitèle<sup>55</sup>. Il ne porte pas de vêtements, si ce n'est le manteau bleu qui tombe dans son dos et sur son épaule gauche et qui couvre sa jambe droite.

Après Dionysos, on trouve encore deux arcades avec chacune un personnage (Fig. 13). Dans la première se tient un satyre. Il reprend le mouvement vers la droite en faisant un grand pas. Sa jambe droite croise ainsi sa jambe gauche. C'est donc le contraire de la position de Dionysos. L'immobilité du couple central est ainsi soulignée. Son buste est représenté de face. Mais lui aussi regarde en arrière, pour dire adieu à une vie antérieure et pour voir si on le suit. Son bras droit n'a pas été conservé, mais vu la façon dont il est amorcé, il devait être levé. À gauche, il tient un *pédum* sur son avant-bras levé. Sa tête, comme celle de Pan, est ceinte de rameaux verts. Il a aussi un nimbe jaune bordé de rouge. Il porte pour tout vêtement une peau de faon verte tachetée semblable à celle de Pan, qui couvre sa hanche droite et son épaule gauche, avec un noeud à hauteur de la poitrine<sup>56</sup>. À

motifs d'entrelacs reproduits sur les pilastres entre ces personnages ne se continuent pas dans les arcades comme c'est le cas dans les autres endroits: par exemple à côté de Dionysos et d'Ariadne.

Le dessin de reconstitution de Madame M. Flury-Lemberg (1988, Fig. 779) montre partout les coupures entre les différents fragments de la tenture. Ceci met en évidence qu'il y en a une aussi dans le tissu entre ces deux personnages. Il est regrettable qu'à cause du manque de place dans le musée ceci ne soit pas indiqué dans l'exposition. Nous ne sommes pas sûrs de l'identité de ce personnage manquant. Nous devons forcément nous tenir à l'arrangement actuel.

<sup>52</sup> Deonna 1915, 343; Willers 1988, 78; Balty 1990, 91, 92, 93; Willers 1992, 147.

<sup>53</sup> Horn 1972, 52: "Dionysos reicht dem Panther den Unsterblichkeits Trank; er gewährt ihm auch seinen Mysterien."

<sup>54</sup> Les différentes coiffures de la tenture valent la peine d'être étudiées. Puisque cette analyse sort du cadre du présent article, je me contenterai de renvoyer à: Gennep, van 1993, 166 e.s.; Leach 1957, 154: "... ethnographic evidence fits the following pattern in a quite obvious way. In ritual situations: long hair = unrestrained sexuality; short hair or partially shaved head or tightly bound hair = restricted sexuality; close shaven head = celibacy"; À ce propos, je signale que la matrone a les cheveux qui pendent librement sur son épaule droite. La *monosandalos* a une chevelure nouée court. Ariane a des mèches relevées dans le cou et une touffe sur la tête. Dionysos a une abondante chevelure faite de longues boucles qui pendent sur ses épaules et devant sa poitrine.

<sup>55</sup> LIMC sub Dionysos, 530; Balty 1990, 32, 33, 89.

<sup>56</sup> Il est difficile de déterminer si la peau verte tachetée de Pan et du satyre est une *nébride* ou une *pardalide*. La première est la peau d'un faon que l'on a mangé (sacrifié) pour acquérir ses forces ou ses qualités. Νεβριζω signifie: porter une peau de faon comme une Bacchante (Dem. cor., 259). Une *pardalide* est la peau d'une panthère. Le fait que les fragments des pattes arrière de la panthère figurant dans l'arcade de Dionysos ont exactement le même aspect que les pièces de l'habillement de Pan et du satyre mentionnées ci-dessus plaideraient en faveur de cette seconde solution. Turcan 1966, 487/88.



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Fig. 6. Tenture de Dionysos, Abegg-Stiftung, Riggisberg.  
 Fig. 7. Le vieillard (Somnus) au februum, détail de Fig. 6.  
 Fig. 8. La matrone, détail de Fig. 6.  
 Fig. 9. La Monosandalos, détail de Fig. 6.



droite, un van de fruits gît sur le sol près de lui, un *liknon* sans *phallos* avec simplement le produit de la première récolte, signe de fécondité.

Au bout de la rangée, on a en outre conservé les restes d'une ménade (Fig. 13). Nous voyons encore qu'un petit fragment de son vêtement flotte au vent vers la gauche, ce qui indique qu'elle avance vers la droite. Son bras droit est croisé sur son buste, qui est représenté de face. Elle tient quelque chose dans ses deux mains levées le long du corps, peut-être un fruit. Sa tête est une fois de plus tournée vers l'arrière. On aperçoit ensuite l'ébauche d'une nouvelle arcade, qui n'a pas été conservée. La tapisserie s'arrête là.

Que pouvons-nous déduire de tout ceci? Il est question d'un cortège avançant lentement. Le plus intéressant, c'est que nous retrouvons en gros dans ce mouvement la même figure de style que sur le plat d'Achille d'Augst, avec du côté gauche un personnage fermant la marche, en fait le dernier de la file, qui regarde droit devant lui, tandis que les autres avancent en tournant la tête pour jeter un coup d'oeil en arrière. Cette règle souffre toutefois quelques exceptions, puisque trois personnes sont immobiles: la *monosandalos*, Ariane et Dionysos. Voilà qui forme déjà un lien entre elles.

Dans le couple divin, c'est bien sûr le personnage de Dionysos qui prime. C'est par lui que l'on entre dans la nouvelle vie. Il est le point d'intersection. Je pense que cette idée est également exprimée par sa pose bien connue les jambes croisées. Ce croisement marque une fin. C'est chez lui que le revirement a lieu<sup>57</sup>.

Il faut ensuite s'intéresser aux vêtements. Les deux personnages à l'extrême gauche, le vieil homme avec son fléau et la matrone, sont complètement habillés, contrairement au reste de la compagnie. Le plus frappant des deux est la matrone, ne serait-ce que par la couleur de sa tenue, où le rouge et le bleu dominant, avec une reprise du bleu dans le nimbe.

Ceci n'est pas le fait du hasard. Nous retrouvons un écho du rouge et du bleu chez la *monosandalos*, une préfiguration dans l'écharpe rouge que le vieil homme porte sur son épaule gauche.

Les trois premières figures ont donc elles aussi un lien qui les unit, bien que la *monosandalos* porte clairement une dualité en elle. Elle est en train de se défaire de sa courte tunique rouge. Elle est en partie couverte d'un manteau pourpre. Elle est donc pour une moitié très chichement vêtue et pour l'autre somptueusement parée de la pourpre royale<sup>58</sup>. Elle change de vêtement. Elle va s'identifier avec Ariane. Elle sera la nouvelle épouse de Dionysos. Ils vont conclure un *hieros gamos*<sup>59</sup>. Nous ne pouvons que conjecturer sur la manière dont la consommation de cette union était évoquée

dans la pièce où la tenture a dû se trouver. Il n'est guère plausible que la matrone à côté de la *monosandalos* soit la mariée. Dionysos n'était certainement pas intéressé par les dames d'un certain âge.

La matrone joue un autre rôle. Elle apporte une couronne qui ressemble à celle qu'Ariane tient dans la main. De la main gauche, elle tend une coupe de vin. Elle est la prêtresse-maîtresse de cérémonie qui remet à la nouvelle épouse les offrandes destinées à Ariane et Dionysos, ou peut-être montre-t-elle les signes qui l'attendent, la couronne et le vin. Elle est caractérisée en tant que prêtresse pendant un acte rituel par le port d'un *pallium quadratum*, un survêtement liturgique<sup>60</sup>.

Pan, qui, d'après une des versions du mythe, tira Ariane du sommeil à Naxos, souffle déjà de toutes ses forces dans sa syrinx à côté de la *monosandalos*<sup>61</sup>. Réveiller quelqu'un, c'est en fait le sortir d'une mort symbolique, l'éveiller à une nouvelle vie, à une nouvelle perception des choses, comme une révélation<sup>62</sup>. Ne disons-nous pas, lorsque nous n'arrivons pas à cerner un problème, que "la nuit porte conseil"?

<sup>57</sup> Dionysos est souvent représenté dans cette position, s'appuyant sur une colonne, voir supra n. 55. D'après moi, les jambes croisées et la colonne près de Dionysos ont le même sens. La présence d'une colonne isolée dans une représentation a déjà fait couler beaucoup d'encre. Elle est généralement considérée comme la *pars pro toto* d'un sanctuaire. Pour Madame Marinatos 1993, 179, 180, elle indique l'endroit où la divinité va apparaître. Je pense que nous devons voir la colonne comme une *pars pro toto* du portail que le mourant doit franchir pour entrer dans une autre existence ou qui, dans le cas où une divinité se trouve près de la colonne, indique que celle-ci règne sur les deux mondes. Clairmont 1968, 280, dit à propos d'Achille sur le vase de Portland: "It becomes the commonest formula – column, dead man seated by it – sometimes relatives bringing offerings." Ici aussi, Achille tourne la tête en arrière, en signe d'adieu. Des mosaïques du musée d'El Jem en Tunisie illustrent une scène dans laquelle un animal tue l'autre. A proximité se trouve une colonne qui présente en son sommet une ouverture à travers laquelle s'enfonce la branche d'un arbre mort. La colonne signifie ici clairement la porte de la mort. Loos-Dietz, de 1988, 155, fig. 10, 11; pour la délimitation territoriale, voir Gennep, van 1993, 15 e.s.

<sup>58</sup> Le pourpre apparaît aussi dans la "Villa dei Misteri". Lehmann 1962, 66: "... Like the neophyte the figure behind the dancer is clothed completely in purple (they are unique, in this respect, in the cycle ...)"

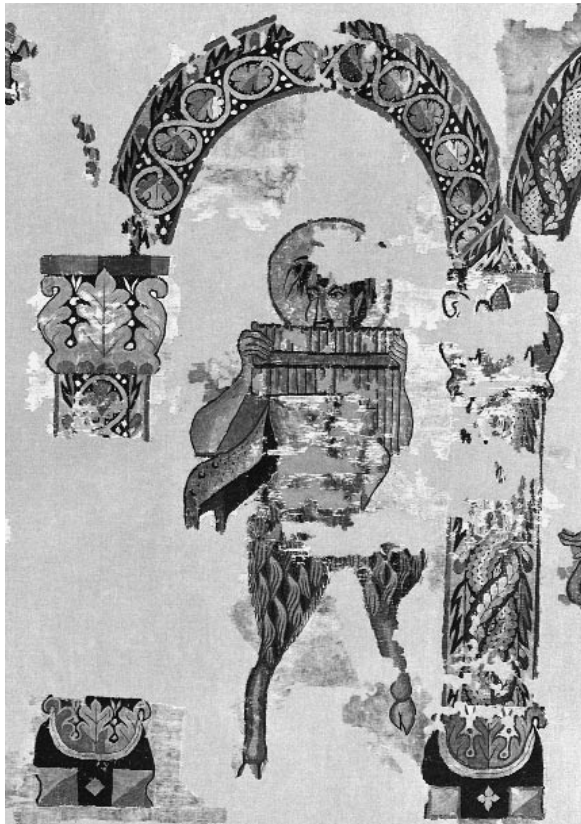
<sup>59</sup> Turcan 1966, 510-523, surtout 521.

<sup>60</sup> Turcan 1966, 402, 517; Balty 1990, 91.

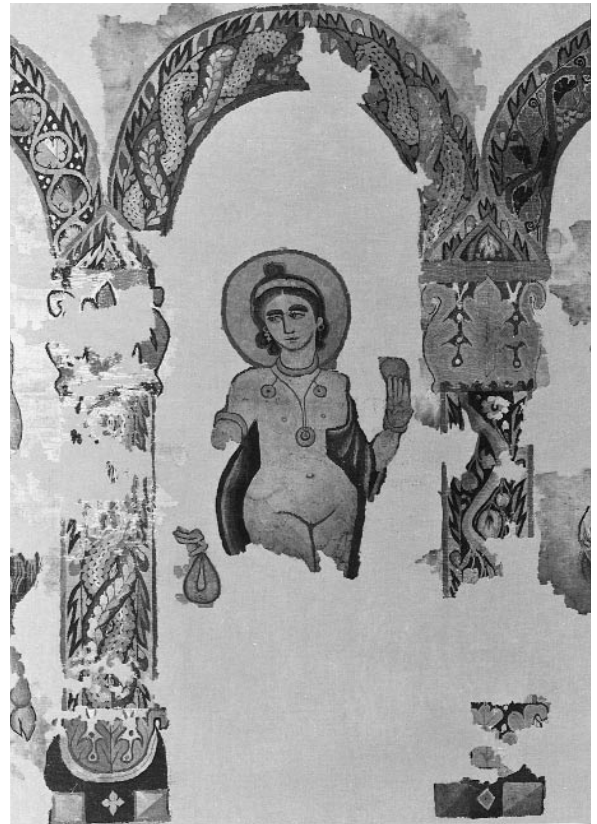
<sup>61</sup> Balty 1990, 95.

<sup>62</sup> Le thème du sommeil comme mort symbolique indiquant le passage d'une situation à une autre, où une différence fondamentale intervient, est présent dans Genèse 15. Dieu annonce à Abram qu'il aura une descendance innombrable. Il lui ordonne de fendre de jeunes animaux en leur milieu et de placer chaque moitié en face de son autre moitié. Abram tombe ensuite dans un profond sommeil. Un réchaud fumant et une torche de feu passent entre les morceaux.

Ce dernier thème, la progression entre des animaux coupés en leur milieu, est aussi considéré comme un "rite de passage". Gennep, van 1993, 19; Deonna 1915, 345, n. 3 avec litt.



*Fig. 10. Pan, détail de Fig. 6.*



*Fig. 11. Ariane, détail de Fig. 6.*



*Fig. 12. Dionysos, détail de Fig. 6.*



*Fig. 13. Satyre et ménade, détails de Fig. 6.*



Notre *monosandalos* n'est pas représentée endormie, comme c'est si souvent le cas dans l'iconographie d'"Ariane à Naxos". Ce sommeil est néanmoins suggéré en la personne du vieil homme armé de son fléau. Je pense que nous devons voir en lui la personnification de "Somnus", à propos duquel Turcan dit: "Somnus est toujours un vieillard, abondamment barbu et chevelu, dont la représentation varie assez sensiblement d'une interprétation à l'autre"<sup>63</sup>. C'est chez lui, le dernier de la file, que commence en fait le processus, la flagellation jusqu'à ce que le candidat perde conscience, meure symboliquement. Son pantalon étriqué est à moitié rose pâle et à moitié noir dans le sens de la longueur. La signification de ces couleurs n'est pas très claire, si ce n'est que le noir peut faire référence à la mort. Il accomplit la première et sinistre partie de la cérémonie. L'événement se lit ainsi de gauche à droite.

Je pense toutefois que nous devons considérer la situation comme suit. Le processus de flagellation est déjà passé. Le vieillard ne se trouve d'ailleurs pas à côté de la *monosandalos*. Entre eux deux il y a la matrone, la prêtresse qui s'occupe déjà de l'initiation, et la *monosandalos* enfille déjà son habit de fête. Le vieil homme, "Somnus", n'est là qu'en souvenir de ce qui a précédé. Il ne joue plus de rôle actif. L'ensemble de la représentation sur la tenture est placé sous le signe de la résurrection par l'initiation. Le message ne pouvait être plus débordant d'espoir et plus joyeux.

Nous pouvons encore affiner notre interprétation du personnage. On sait que le moment-clé d'une initiation était l'instant où l'on dévoilait le *phallos*, qui se trouvait dans le *liknon* entre les produits de la terre. On avait coutume de placer un voile sur la tête du néophyte pour qu'il ne puisse d'abord rien voir<sup>64</sup>. Cette cécité temporaire est comme le sommeil, c'est-à-dire une mort symbolique. Dans la "Villa dei Misteri", la jeune fille qui risque d'être flagellée et qui enfouit sa tête dans le giron d'une matrone a déjà les yeux fermés. Il y a là en outre une allusion à l'occultation de la vue dans le geste de la matrone qui soulève son manteau<sup>65</sup>. Je me demande néanmoins si, ici aussi, la flagellation par le démon féminin aux ailes noires n'a pas déjà eu lieu. Madame Balty fait observer que, vers la fin du IV<sup>e</sup> siècle, le *liknon* avec le *phallos* disparaît de l'iconographie et qu'apparaît alors le *februum*, le fléau qui est lié aux Lupercales. Elle suppose que le *februum* remplace le *liknon* sur le plan de la signification, probablement parce que le *phallos* était jugé trop obscène<sup>66</sup>.

Il me semble que cette comparaison n'est pas tout à fait correcte. Je voudrais expliquer qu'avec la disparition de l'illustration du dévoilement soudain du *phallos*, que ce soit par le retrait du morceau de

tissu qui le cache ou de celui qui est placé sur la tête du néophyte, la notion de recouvrement de la vue, après cécité, par la contemplation du *phallos* avait perdu son sens.

Puisque cet instant de révélation avait disparu, il ne restait plus qu'une solution. Il fallait mettre l'accent sur la première phase, à savoir la mort symbolique par la flagellation. Et celle-ci est représentée en la personne du vieillard "Somnus" armé de son *februum*. Le *phallos* est un signe de fécondité et donc d'immortalité, d'éternité. Le *februum*, au contraire, fait référence à la mort. L'accomplissement effectif de l'initiation se déroule en coulisse, comme dans un drame grec.

Nous avons donc vu qu'après l'annonce de la fin de la vie antérieure, la matrone, en somptueux habit d'apparat, apporte les attributs de l'admission aux mystères, du mariage mystique avec Dionysos, le tout au son "vivifiant" de la syrinx de Pan.

Après l'initiation, le cortège de fête poursuit sa progression en dansant à droite du couple divin. Il est formé des personnes déjà initiées, les satyres et les ménades. Remarquons que la ménade représentée ici est, vu sa disposition, comme le reflet de la *monosandalos* par rapport au couple divin. Nous pourrions dire qu'il s'agit là de son image future après l'union avec Dionysos, après avoir été un court instant Ariane.

Pour résumer encore une fois, nous pouvons donc dire que, d'après nous, les préparatifs du mariage mystique ont lieu à gauche du couple divin, tandis qu'à droite c'est la joie, l'exubérance, la danse de la fête qui éclate, la fête de la résurrection à une nouvelle vie pour l'éternité.

Ariane tient dans sa main gauche levée une grenade en guise de promesse de fécondité. Le satyre apporte les premiers produits de la terre dans un *liknon*, d'où a disparu le choquant *phallos*.

Maintenant que nous avons pu établir le rôle de la matrone, il reste à savoir pourquoi elle est la seule à porter un nimbe bleu. Nous abordons ainsi le problème peu traité de la symbolique des couleurs au fil du temps<sup>67</sup>. Celle de la couleur pourpre est connue. Elle était réservée aux plus grands, aux dieux et aux monarques. Elle remplit aussi son rôle sur la tenture qui nous occupe.

<sup>63</sup> Turcan 1966, 514.

<sup>64</sup> Le port d'un voile signifie que l'on se sépare du monde auquel on appartenait. Gennep, van 1993, 168.

<sup>65</sup> Lehmann 1962, 62, 66; Turcan 1989, 183, dit qu'elle n'est pas flagellée.

<sup>66</sup> Balty 1990, 92, 93.

<sup>67</sup> Pour la couleur jaune, on renvoie au cueilleur de safran de Cnossos. Deonna 1929, 169 e.s. Il cite: "La germination des oignons consacrés dans la terre, devait symboliser la vie latente des morts, et l'espoir de leur résurrection. (Picard 1927, 362-363)"; voir aussi: Marinatos 1993, 195.



On dit bien de la combinaison du rouge et du bleu qu'elle fait référence au mariage<sup>68</sup>. Nous pourrions dans le cas présent l'admettre chez la matrone et la *monosandalos*. Mais il faut incontestablement chercher ailleurs le sens de la couleur bleue du nimbe de la matrone<sup>69</sup>.

Bien qu'il ne s'agisse pas d'une règle immuable, nous rencontrons souvent dans l'art chrétien un nimbe bleu entre autres chez les anges, et tout particulièrement chez les archanges<sup>70</sup>. Les anges sont des messagers, qui assurent la communication entre le ciel et la terre.

Nous devons aussi nous intéresser à la genèse du nimbe. Nous touchons ainsi dans ce qui suit au domaine de l'hypothèse. Nous avons déjà évoqué les fresques de Xeste 3 à Akrotiri sur l'île de Santorin, où une jeune fille se blesse au pied<sup>71</sup>. Nous n'approfondirons pas ici l'idée qui s'y rapporte, "initiation through encounter with death"<sup>72</sup>. En résumé, disons que Madame Marinatos considère que la fresque avec les trois jeunes filles de l'adyton de Xeste 3 n'est pas une unité dans le sens narratif, mais représente trois phases de l'initiation d'une jeune fille<sup>73</sup>. À l'extrême droite figure une toute jeune fille qui ôte son voile, un geste signifiant, et qui regarde avec effroi l'autel d'où s'écoule du sang. Au centre se tient la jeune fille au pied blessé, qui se trouve donc dans la phase liminale. Tout à fait à gauche, une personne déjà initiée est représentée en jeune femme.

Ce qui nous intéresse présentement, c'est leur coiffure. Madame Marinatos l'étudie: il s'agit d'une tête tantôt tondue avec une boucle juvénile, tantôt chevelue. La partie dégarnie du crâne est peinte en bleu. C'est aussi le cas sur la fresque d'Akrotiri avec les jeunes hommes<sup>74</sup>. Quand les cheveux repoussent déjà, la personne porte souvent un bandeau bleu dans la chevelure. La jeune femme à gauche a de nouveau des cheveux.

Une tête tondue est prête à recevoir un message d'en haut. Les cheveux entravent la communication. Nous voyons ici qu'une tête chauve, abstraction faite de la mèche juvénile, se rencontre chez les personnes non encore initiées. Mais pourquoi donc le crâne est-il alors teint en bleu? Seule une réponse hypothétique peut être apportée à cette question: pour représenter la connexion avec le ciel, l'ouverture au surnaturel.

R. Merkelbach explique que les prêtres d'Asclépios portaient probablement un bandeau creux rempli d'alcool brûlant autour de la tête, qu'une tête tondue est en accord avec le ciel, et que cette symbolique est liée à la tonsure<sup>75</sup>. Il ajoute que le nimbe peint des saints chrétiens a peut-être ces éléments pour toile de fond. Voilà ce qui pourrait expliquer le nimbe bleu de notre matrone.

La ville d'Akrotiri fut détruite par un tremblement de terre vers 1500 av. J.-C. À cette époque, elle était déjà en ruines et vidée de ses habitants, sans doute en raison de précédentes menaces du volcan. Notre point de repère se situe donc en des temps très reculés. Mais lorsque l'on songe que le thème de la blessure à un seul pied existait déjà à ce moment-là, lorsque l'on songe également que ce même thème, sous la forme du *monosandalos*, se retrouve encore à la Renaissance, comme j'espère pouvoir le démontrer plus tard, force nous est de conclure qu'il part d'une idée générale profondément religieuse.

Celle-ci connaît bien sûr au fil du temps des explications et des représentations différentes, lesquelles doivent par conséquent être traitées avec la circonspection nécessaire. Nous devons toujours garder à l'esprit que certaines caractéristiques n'apparaissent pas seulement chez celui qui est initié mais aussi chez le dieu lui-même, ainsi que chez les prêtres qui exécutent l'opération ou chez une prêtresse-maîtresse de cérémonie comme la matrone au nimbe bleu de la tenture de la Fondation Abegg.

La tentation est même grande de relever l'analogie peut-être fortuite entre le collier que présente la jeune femme déjà initiée de la fresque d'Akrotiri et la couronne que la matrone tient dans la main droite<sup>76</sup>.

Les initiations sont évidemment différentes. Les peintures d'Akrotiri renvoient au culte de la grande déesse-mère dans l'Europe ancienne<sup>77</sup>. Dionysos

<sup>68</sup> Schmidt 1963, 168-177.

<sup>69</sup> Bowersock 1993, 53, ne voit pas d'explication à la présence de la couleur bleue.

<sup>70</sup> Korol 1979, 182 e.s., avec renvoi à de nombreux endroits et de nombreuses figures où un nimbe bleu apparaît. Il se demande si la prédilection pour le nimbe bleu au début de l'art chrétien ne peut pas s'expliquer par l'influence de l'art païen; Kötzsche 1992, 108, fig. 4, la mosaïque de l'enfant Jésus trônant de S. Maria Maggiore de Rome avec les quatre anges, qui portent un nimbe bleu. Je renvoie encore à un archange de SS. Cosma e Damiano et à un groupe d'anges de S. Maria in Domnica (Rome), dont deux portent un nimbe bleu, Matthiae 1987, Pl. XXVI, XLIII, XLIV.

<sup>71</sup> Voir p. 185-186 supra; L'explication est qu'elle se trouve dans la phase de transition du "rite de passage", le temps de l'isolement, où elle doit marcher nu-pieds sur les rochers pour cueillir des crocus, ce qui provoque sa blessure au pied. Voir à ce propos, et à propos de la signification du sang, Marinatos 1984, 79 e.s. et 1993, 203 e.s.

<sup>72</sup> Marinatos 1984, 80.

<sup>73</sup> Doumas 1992, 127 e.s., Pl. 100-108; Marinatos 1993, 208.

<sup>74</sup> Koehl 1986, 100 e.s.; Davis 1986, 399-406; Doumas 1992, Pl. 79, 80, 81, 109, 111, 112/3, 115.

<sup>75</sup> Merkelbach 1993, 55/56.

<sup>76</sup> Doumas 1992, Pl. 101, 104.

<sup>77</sup> Gimbutas 1989, XVII; Nous trouvons notamment des traces du passage du culte de la fécondité de la terre nourricière, qui était à l'origine de tout, à la croyance en un Dieu créateur unique et tout-puissant, dans le récit de la création Gen. I, 11, 12, où Dieu ordonne à la terre de produire de la verdure, des fruits et des arbres et où c'est la terre qui le fait. Ekschmitt 1993, 13.

est une divinité d'un tout autre panthéon. Il n'empêche que, dans les deux cas, il s'agit d'un "rite de passage". Et, dans les deux cas, on recourt à la même image pour l'exprimer: un seul pied qui ne fonctionne plus bien, blessé ou déchaussé, ce qui fait de la personne un boiteux.

Enfin, je ne crois pas que c'est par hasard que, dans la même tombe que la tenture, se trouvait une étoffe de soie avec des représentations de certains épisodes de la vie de Marie<sup>78</sup>. Cette oeuvre illustre la nouvelle annonce du salut. C'est ici l'ange non ailé, mais clairement identifiable en tant que messager céleste, qui annonce le mariage mystique, l'union de la vierge avec Dieu, un *hieros gamos*, une forme, un moyen d'expression pour désigner l'être humain qui tend vers le divin, quel que soit le contenu que l'on veuille donner à cette notion. Les idées sont insaisissables. Nous avons besoin d'images et de récits.

Dans cette tombe, tous les moyens possibles et imaginables ont donc été utilisés pour donner l'assurance de la réunion avec la puissance divine, la garantie que la mort ne marquait pas une fin, mais le début d'un nouveau commencement. Il n'y avait pas plus sûr. Toutes ces attentions et ces souhaits pleins de sollicitude étaient certainement destinés à un défunt très particulier et très cher, une jeune femme.

## CONCLUSION

Tous les *monosandaloi* de l'antiquité n'ont pas été abordés dans les chapitres qui précèdent, loin s'en faut. Ce n'était d'ailleurs pas nécessaire. Notre but était d'affiner quelque peu l'explication du phénomène. On a déjà tant écrit à ce sujet sans pour autant arriver à une solution concluante.

J'ai eu l'avantage de pouvoir disposer de quelques nouvelles découvertes. Celles-ci ont en outre la particularité de restituer une histoire, de sorte que le *monosandalos* a un contexte. J'ai aussi pu m'appuyer sur le travail de pionnier accompli par Deonna dans ce domaine<sup>79</sup>. J'ai continué à le développer. Deonna a surtout mis l'accent sur l'aspect chthonien – et dès lors aussi thérapeutique. Cette approche, bien que correcte, est selon moi encore trop étroite.

Reinach a expliqué que l'idée de possession était jadis associée au soulier<sup>80</sup>. Au moment de l'achat, une chaussure était remise en signe de transfert de propriété.

Tel est aussi le fondement de la cérémonie de l'*halizah* en cas de refus d'acceptation du lévirat<sup>81</sup>. Dans l'*halizah*, l'homme qui est censé épouser la veuve mais qui refuse est privé par elle d'une de

ses chaussures. Il perd le droit de la posséder, elle et l'héritage. Il devient un *monosandalos*.

Dans Ruth 4, 1-12 figure une description de l'opération par laquelle Booz acheta à l'homme qui se trouvait dans l'obligation d'un tel mariage mais n'en avait pas envie, le droit d'acquisition de la terre d'Elimélec. Booz avait par conséquent le droit et le devoir d'épouser Ruth<sup>82</sup>. Pour valider l'accord, cet homme enleva une chaussure et la remit à Booz.

En général, on peut donc dire que la perte ou la cession d'une chaussure marque une rupture avec la situation antérieure. C'est une *separatio*. C'est la phase *préliminale* d'un "rite de passage".

Nous avons pu constater que le *monosandalos* apparaît en cas d'initiation dans pratiquement tous les domaines: mariage, passage de l'état de jeune homme à celui de guerrier, mise à l'épreuve pour mériter la royauté, admission aux mystères, donc passage du profane au sacré, ainsi que guérison<sup>83</sup>.

Ceci enrichit la notion et, par là, permet de situer plus facilement les *monosandaloi* isolés. La statue énigmatique de Rome connue sous le nom de "Suppliante Barberini", une *monosandalos*, est considérée par Hauser comme une sculpture de tympan représentant la Pythie<sup>84</sup>.

Je veux encore mentionner l'interprétation que van Gennep donne des petites statues de Rome représentant un jeune garçon en *monosandalos* avec un porcelet dans les bras. Il explique que, dans les mystères d'Eleusis, le néophyte allait d'abord se baigner dans la mer avec son porcelet pour se purifier avant de pouvoir participer à la suite des cérémonies<sup>85</sup>. C'est la *separatio* par la purification. Sa représentation en *monosandalos* est là pour indiquer qu'il est en train de vivre un "rite de passage".

Contrairement à la représentation sur la tenture de la Fondation Abegg, la fresque de la "Villa dei Misteri" met en scène Dionysos en personne chaussé d'une seule sandale<sup>86</sup>. Deonna met l'accent sur les dieux chthoniens tels que, entre autres,

<sup>78</sup> Kötzsche 1993, 183-194.

<sup>79</sup> Deonna 1915, 343 e.s.; 1935, 50-72; 1956, 156.

<sup>80</sup> Reinach 1932, 86-96. Dans l'Exode 3, 5, il est dit: "Il dit: 'N'approche pas d'ici, enlève tes sandales de tes pieds, car le lieu sur lequel tu te tiens debout est un sol de sainteté!' Le mot sainteté signifie que le sol appartient à Dieu. Chaussé, Moïse en prendrait possession. Lurker 1973, 277.

<sup>81</sup> ERE 1920, 476; Enc. Jud. Vol. 11, 122-130.

<sup>82</sup> Lantsheere, de 1896, 149-161; Reinach 1932, 83-96; Schoneveld 1970, 34-50.

<sup>83</sup> Gennep, van 1993, 182.

<sup>84</sup> Hauser 1913, 60, 79; Deonna 1935, 61.

<sup>85</sup> Esdaile 1909, 2; Deonna 1935, 61; Gennep, van 1993, 20, 89 e.s.

<sup>86</sup> Deonna 1935, 60.



*Fig. 14. La "Buveuse de Vichy", Mus. du Louvre, Paris.*

Dionysos, Asclépios et leurs adeptes<sup>87</sup>. Il renvoie à un relief de la seconde moitié du Ve siècle, où Asclépios lui-même ne porte qu'une seule chaussure<sup>88</sup>.

A Dumbarton Oaks, on trouve une statuette en bronze représentant un homme décharné avec une seule chaussure<sup>89</sup>. Elle est considérée comme une copie du Ier siècle après J.-C. d'une oeuvre hellénistique, probablement elle-même du Ier siècle avant J.-C. Il s'agit une fois de plus d'un adepte d'Asclépios, qui selon moi doit d'abord mourir symboliquement comme malade pour pouvoir ressusciter comme homme en bonne santé, et qui traverse donc un "rite de passage".

A ce propos, il est intéressant d'attirer l'attention sur une découverte provenant de Vichy, aujourd'hui conservée au Louvre<sup>90</sup> (Fig. 14). Il s'agit de l'oeuvre intitulée "Buveuse de Vichy", une petite statue en bronze, ou plutôt un gobelet anthropomorphe de 9,7 sur 7,3 cm. On la date de la fin du Ier ou du début du IIe siècle. Elle représente une femme accroupie, repliée sur elle-même.

<sup>87</sup> Deonna 1935, 66.

<sup>88</sup> Deonna 1935, 59.

<sup>89</sup> Richter 1956, No. 17, 32-35, Pl. XIV; Robertson 1972, 42/43.

<sup>90</sup> Thevenot 1966, Fig. 1, 20-27; Bourgeois 1991, 236-238; Corrocher 1992, fig. en 47, 54.



Celle-ci porte un vase rond sur le dos. Elle tient un gobelet dans la main droite. Des docteurs ont essayé de définir sa maladie rhumatismale compte tenu de l'affaissement de son squelette et de l'état d'un de ses pieds qui, selon eux, est tellement enflé qu'il ne supporte plus la moindre chaussure! Car oui, cette femme est une *monosandalos*.

Qu'il me soit pourtant permis de dire que nous avons à nouveau affaire ici à une adepte d'Asclépios, qui offre l'eau salvatrice contenue dans le vase. En tant que *monosandalos*, elle souligne le pouvoir d'Asclépios et recommande de boire l'eau pour guérir, ressusciter de la maladie, maladie qu'elle personnifie peut-être elle-même.

Je voudrais terminer sur cette idée de pouvoir thérapeutique. Je suis d'avis que, chez un être humain, un *monosandalos* est l'expression d'un processus d'initiation, d'un "rite de passage", mais que, chez un dieu, il est la marque de son pouvoir sur le monde supra- et infraterrestre. Chez un homme, il peut signifier qu'on est voué à la mort. Il peut s'agir d'une mort symbolique suivie d'une résurrection dans une vie différente ou meilleure, que ce soit dans un *hieros gamos* ou à l'état de guerrier, de prêtre, de roi, d'initié obtenant de Dionysos l'immortalité, ou d'homme en bonne santé guéri de la maladie par Asclépios.

Les dieux sont quant à eux déjà immortels. En *monosandalos*, ils traduisent, par leur pouvoir sur le monde supra- et infraterrestre, l'éternité, le perpétuel recommencement de la mort et de la résurrection, comme Dionysos l'illustre également en faisant le geste de verser le vin<sup>91</sup>.

J'ai conscience d'avoir fait des rapprochements entre des oeuvres d'art issues de régions et d'époques très différentes. C'est que, d'après moi, une seule et même idée fondamentale est toujours à la base du problème traité ci-dessus: le combat de l'être humain contre la mort. Personne, nulle part, n'a jamais voulu admettre une fin absolue. Il reste toujours une croyance en la résurrection et donc en l'éternité. La mort physique est préfigurée dans toutes sortes de formes de mort symbolique.

Ce n'est pas le personnage du *monosandalos* en tant que tel qui est important, mais bien l'idée, la croyance qui le sous-tend, dont il est l'un des nombreux interprètes. C'est ce qui explique sa persistance sur un aussi long laps de temps.

Ainsi naît cette image haute en couleur aux multiples facettes, aux multiples formes, pour exprimer une transition, un "rite de passage", vers les états les plus divers; tantôt sous les traits d'un *monosandalos*, tantôt par une purification éventuellement combinée au franchissement d'une rivière, d'une limite, tantôt par l'action d'enfiler d'autres vêtements<sup>92</sup>. Adam et Ève neurent-ils pas se couvrir d'une feuille de figuier, et n'avons-nous pas grandi avec le conte de Cendrillon qui perd sa pantoufle de verre?<sup>93</sup>

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<sup>91</sup> Horn 1972, 52.

<sup>92</sup> Brelich 1955-57, 480.

<sup>93</sup> Dans l'iconographie, nous voyons généralement Adam et Ève avec une feuille de figuier. Dans Genèse 3.21, il est dit: "Iahvé Elohim fit pour l'homme et sa femme des tuniques de peau et les en revêtit"; Peebles 1923, 72, signale que, dans l'*Apocalypsis Mosis*, il est dit qu'Eve cherche des feuilles de figuier pour s'en couvrir.

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# The Study of Greek Fortifications

## A review article

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The world of the ancient Greeks, whether before or after the lifetime of Alexander the Great, was, on the whole, without a *pax Graeca*, and most towns and cities were at one time or another protected by a circuit wall, and sometimes by a few signal towers in the *chora* or – perhaps – by a chain of frontier forts. Within the heritage of Greek civilization no class of monuments or architectural achievements stands out more conspicuously than that of city walls, of field fortifications and of walls enclosing an entire oasis. If for modern tourists with their esthetic predilection these defence works do not rank high, it was different for travellers of the nineteenth and early twentieth centuries, who showed a deep interest in military remains.

In the twentieth century scholars began to concentrate on individual fortified sites; Krischen for instance published a monograph on the fortifications of Herakleia-on-Mt Latmos (1922) and Von Gerkan wrote studies on the city walls of Miletus (1935) and of Dura-Europos (1939). Most circuits remain virtually unpublished or are known only sketchily. This also applies to those in Greece itself and to fortifications on the islands of the Aegean Sea<sup>1</sup>. In recent years a group of scholars with intimate knowledge of ancient artillery, of Greek city wall architecture and also of the pertinent archaeological terrains published comprehensive works in which personal observation, comparison, interpretation and theory reached new and high levels: F.G. Maier (1959, 1961), E.W. Marsden (1969), F.E. Winter (1971), Y. Garlan (1974), A.W. Lawrence (1979) and J.-P. Adam (1982). For the North-Eastern sector of the lands conquered by Alexander the Great H.P. Francfort's report *Les fortifications en Asie Centrale de l'âge du bronze à l'époque kouchane*, Paris 1979, is a systematic survey rich in detail, while A.W. McNicoll's doctoral dissertation *Hellenistic Fortifications from the Aegean to the Euphrates* (1971; unpublished; there is a copy in the Bodleian Library at Oxford) covered Asiatic regions further West<sup>2</sup>. The set of works mentioned here has pushed the study of Greek fortifications to a higher grade of sophistication, representing a framework for looking at city circuits with particular questions in mind. The time was ripe for convening a conference.

PIERRE LERICHE & HENRY TRÉZINY (eds.), *La fortification dans l'histoire du monde grec, Actes du colloque international <La fortification et sa place dans l'histoire politique, culturelle et sociale du monde grec>*, Valbonne décembre 1982. Paris: Éditions du CNRS, 1986 (28 cm., 651 pp., 331 figs. plus a comparative atlas of fortifications consisting of 16 plates, all of them on a scale of 1 : 20,000). – ISBN 2-222-03886-3. – Price: FF 490.

The richly illustrated book reviewed here contains the lectures of a symposium where – with the exception of Professor A.W. Lawrence – the majority of students of Greek city walls were present. A number of specialists who did not have the opportunity of taking part contributed a paper *in absentia*. The committee which prepared the meeting requested the participants not to lose sight of the general issues. The conference considered questions such as: was the erection of a city wall cost-effective? which was the manpower involved in building an *enceinte*? what was the relationship between the number of defenders and the length of a city wall? in what ways did building materials and their use affect construction? how did the new technology of offensive, stone-throwing catapult artillery<sup>3</sup> affect cities and their fortification systems? what about defensive artillery and its effect on fortification architecture?

The symposium was also organized with a second purpose in mind: attention was not drawn particularly to Greece itself but rather to the distant regions where the Greeks founded colonies<sup>4</sup> and to the lands conquered by Alexander the Great. Apart

<sup>1</sup> For a newly published circuit, that of Hyettos in Boeotia, see Étienne and Knoepfler 1976, 45-65, L'acropole et son enceinte, with fig. 9.

<sup>2</sup> The untimely death of the author is a great loss to archaeology. For an obituary see Hennessy 1988. For a summary of his ideas on city defences see McNicoll 1972; McNicoll 1978; and pages 305-313 of the book under review 'Developments in Techniques of Siegecraft and Fortification in the Greek World ca. 400-100 B.C.' See also McNicoll and Winikoff 1983. Finally, see McNicoll 1983.

<sup>3</sup> Knowledge of *arrow-shooting* catapults has recently been extended by two groups of finds of the Hellenistic period, see Baatz 1982 and Baatz 1985.

<sup>4</sup> For a comprehensive report on a local colonial area see Kirigin (Split) 1990 with sketch plans of the fortification circuits of the colonial towns.

from that, Greek fortification technology is now known to have spread beyond the fringes of the Greek world to lands inhabited by non-Greeks, to Caucasian Georgia for instance. As a result of its wide horizon the contributions in this volume range from Afghanistan to Morocco and Spain, from Tunisia to Rumania, from Libya to Sovjet Russia. The book contains contributions in French (34), in Italian (5), in English (5) and in German (2).

Three opening papers comment on the present situation of the study of Greek fortifications. In his introduction to the symposium P. Leriche (Paris) argues (11-14) that fortifications should not be studied as entities in themselves but as elements of society and as components of ancient warfare. Y. Garlan (Rennes) remarks (15-21) that the chronology of many circuits is unknown or uncertain, and that, on the whole, a complete city *enceinte* is only rarely investigated by means of a series of trial tests<sup>5</sup>. He observes that in future scholars should try to reconstruct the ancient measurements as they are found for instance in Philo of Byzantium. Converting archaeological measurings taken at city walls into cubits (*pecheis*; a cubit being one-and-a-half foot) may usually be possible. In 'A Summary of Recent Work on Greek Fortifications in Greece and Asia Minor' (23-29) F.E. Winter (Toronto) is somewhat sceptical about the value of pottery or coin evidence from excavations along city circuits, and he illustrates his point by reconsidering and redating successive phases of the Acrocorinth fortress. Winter further speaks of the desirability of studying harbour fortifications<sup>6</sup>, outlying defences, and the shutters and chases of wall and tower windows<sup>7</sup>.

I shall now summarize a series of contributions found in the book, beginning with Cyprus and with the Greek homelands, an area of which only a few sites are discussed in archaeological terms. In his paper 'Deux nouveaux établissements fortifiés du Bronze Récent à Chypre' (381-384) V. Karageorghis (Nicosia) describes excavations at two thirteenth century B.C. fortified coastal sites lying in locations protected by nature (1230-1200). The pottery is Greek. Refugees from the Aegean-Anatolian world may have temporarily occupied these localities, which constituted strong defensive positions. In Greece, the number of circuits built prior to the fourth century B.C. appears to be relatively small in comparison with the great quantity of Late Classical and Early Hellenistic *enceintes*. In his paper 'The Historical Significance of Fortification in Archaic Greece' (125-131) A. Snodgrass (Cambridge) assembles what evidence there is for ninth-eighth century B.C. walls. They are restricted to Crete, to the Cyclades, and to the

West coast of Asia Minor. The sites of this period do not represent an early stage of later *poleis* and their defence systems. They do not follow the Mycenaean fortification tradition either, constituting a class in themselves. They offered protection against attacks of pirates and of non-Greeks. It is only in Later Archaic times that defences of *poleis* are first recorded. These circuits, which often possessed towers, were sometimes inspired by Oriental examples. On the whole, the study of Greek Archaic fortifications is still underdeveloped<sup>8</sup>. In my own contribution I briefly discuss (315-321) the archaeological *survey* of the fortifications of the Goritsa city in Thessaly, Greece, which was carried out in the years 1970-1981. Perched on an outspur of Mt Pelion, the city occupied a position which was strong by nature. After a description of the towers and of the curtains attention is drawn to the Great Battery, which faces the fairly flat connection with Mt Pelion and which was capacious enough to give room to two or four catapults throwing one-talent stone balls. Being a one period city Goritsa seems to have been built in the last quarter of the fourth century B.C. Soon after that it was abandoned<sup>9</sup>. D. Lazaridis (Athens) reports (31-38) on large scale excavations along the city wall of Amphipolis, a *makron teichos* in the words of Thuc. IV, 102, 3, approximately 7,450 m. long and apparently encircling a *Landschaftsstadt* much of which was rural. The extant wall, which is partly of Hellenistic date, is very well preserved in places. Towers are of circular, semi-circular and of quadrangular shape. The excavations revealed large, oblong openings for draining water through the city wall.

Contributions dealing with the Easternmost parts of the ancient world are discussed in my review for *BiOr*. The following two papers deal with Syria. The fortifications of the ancient Greek cities of Syria cannot be seen above the present level of the ground. What is visible is the reconstruction phase of Byzantine and later date. It has been pointed out, however, that the lay-out of the great Syrian settlements and the trace of their *enceintes* go back to the end of the fourth or the first half

<sup>5</sup> For three examples mentioned in this book see the circuits of Amphipolis (31-38), of Maracanda (Sogdiana) (71-78) and of Motya (West Sicily) (221-227). Garlan himself carried out this type of testing at Thasos (Garlan 1966).

<sup>6</sup> For a recent publication of an ancient fortified harbour in Asia Minor see Schäfer et alii 1981, 63-67 with Tafel 1 and Tafel 27.

<sup>7</sup> On shutters see Ober 1987, 578-580, 603-604.

<sup>8</sup> For an interim report see Wokalek 1973.

<sup>9</sup> For the final report see Bakhuizen (coord.) 1992, 89-166, The Fortifications (based on work by A. Oude Kotte) with 51-88, Quarrying and Geology.

of the third centuries B.C., when the diadochs and the Hellenistic rulers founded a series of new cities (Sauvaget 1934; Sauvaget 1941, 42-45<sup>10</sup>; Van Berchem 1954; Lauffray 1958<sup>11</sup>). Now, in a recent emergency investigation, a section of the Greek wall of Beroia-Aleppo has been excavated over a length of two hundred metres. N. Saliby (Damascus) reports on it in a brief note (55). For a plan of the site see Atlas Plate 12 (A 71). During the excavation a part of the North-Western sector of the wall was cleared; it is 2.50 m. wide and it is built of stone entirely. Particulars are a flight of stairs, a round tower and a square tower.

M. Gawlikowski in 'La première enceinte de Palmyre' (51-54) summarizes his article *Les défenses de Palmyre, Syria* 51 (1974), 231-242. Nomads of the desert had become the permanent inhabitants of the Palmyra oasis, which is irrigated by the Efqa spring. Whereas the Roman defence system of Diocletian (see Atlas Plate 14 [A 78]) enclosed only the built-up city area, defence systems 1 and 2 encircled the oasis as a whole (see Atlas). Wall 1, the width of which is 2.40 m. and which was 3.60 m. high, parapet and merlons not included, was built of mudbrick on a stone socle. There were no towers along the line of this wall, which was not meant to withstand a siege but rather to stop the horse-riding nomads of the desert. It was an enclosure rather than a fortification. However, on the top of Mt Djebel Muntar, a name that means 'look-out post', stood a mighty tower measuring 14 x 14 m. (cf. Gawlikowski 1973, 12-20, *Le rempart*, at 13). The Damascus gate of the oasis enclosure, which was flanked by towers, has been excavated. The first oasis *enceinte*, for a plan of which see fig. 243, possibly dates from the third quarter of the first century B.C. According to the author it was built neither by Greeks (Seleucids) nor by Romans but by the local Palmyraeans themselves.

In the paper 'Developments in Technology of Siegecraft and Fortification in the Greek World ca. 400-100 B.C.' (305-313) A.W. McNicoll (Sydney) bases his comments on a series of fortified sites which were visited and studied by him in Anatolia and in the Near East. His approach is technical and historical rather than archaeological. For instance, the author observes that, as the Hellenistic age drew on, dwindling manpower and shortages of money prevented the planning and building of long circuits as had been constructed earlier at Alexandria Troas, at Ephesus, at Herakleia-on-Mt Latmos, at Halikarnassus and at Seleukia Pieria. He sets the concept of *static/passive* defence against *elastic/active* defence. Important elements of an active defence were sally gates (posterns) and sorties. The consequences of the new technology of

offensive artillery – of stone-throwing catapults that is – are discussed, and it is suggested that a stone-thrower (*lithobolos* or *petrobolos*) in a high position might have thrown as far as 400 m. In the view of McNicoll the improvement of the stone-throwing catapult and its use over a wide area were the result of Macedonian initiatives. The author has carefully analyzed sieges described in Diodorus Siculus, Polybius and Livy; and in a table (310) he demonstrates that between 322 and 303 many city defences were vulnerable when they came under attack. After the new catapult technology had been introduced these systems appeared to be obsolete. Henceforth, thicker curtains and very strong towers protected the vulnerable sectors. After ca 225 many attackers only used ladders; they assailed a city at a variety of points simultaneously. Fortifications built during this later period were compact, and curtains tended to become higher, sometimes consisting of two storeys.

The contribution of A. Wąsowicz (Warsaw) 'Le système de défense des cités grecques sur les côtes septentrionales de la mer Noire' (79-93) is broad and rich in bibliographical references. Although we are informed of the lack of fixed chronological points a pattern emerges. At first the Greek colonists on the Northern shores of the Black Sea lived in small open settlements. Later, they attempted to protect the territories controlled by them by means of long field walls or of walls lying a few kilometres away from a town, as was the case near Kalos Limen, Crimea, figs. 188-189. Eventually, it proved to be necessary to protect the habitats themselves. City walls arose, fortified villages came into being as well as complete territorial defence systems, including roads, watch towers and fortified farms with *kleroi* attached to them<sup>12</sup>. One wonders, Wąsowicz observes, if the artificial mounds in the plains had perhaps been thrown up as look-out locations, or whether they may perhaps conceal the remains of watch towers built of mudbrick<sup>13</sup>. Two Crimean inscriptions refer to *teiche* 'forts' 'fortifications', which word may be a technical term for the defences of the *chora* (92), in the same way as Ps.-Scylax, in the fourth century B.C., used the word *teichos* for coastal fortress-towns such as Rhamnous, Sounion<sup>14</sup> and other places

<sup>10</sup> Compare Plate 52 (the Hellenistic city of Beroia) with Plates 53, 54, 58, 62 and 70 (later periods).

<sup>11</sup> See further Frézouls 1971 and Grainger 1990.

<sup>12</sup> Discussed more fully by Wąsowicz 1975 and Wąsowicz 1983; for the fortifications of Olbia see the book reviewed here figs. 163-168 and Atlas Plate 9 (A 59).

<sup>13</sup> One may compare in this respect the coastal site North of Nea Artaki, Euboea, Greece, *BSA* 61, 1966, 66 (autopsy SCB).

<sup>14</sup> See Lauter 1988.



(passim)<sup>15</sup>. A striking example of a *teichos* is Late Hellenistic Iluraton, which lies seventeen kilometres to the West of Pantikapaion on a steep hill along a major road, and which was laid-out as a compact fortified border town, fig. 170 (after V.G. Gajdukevič). This comprehensive survey has an open eye for controversies and research lacunae. In 1981 Ir. V.P. Tolstikov (Moscow, Pushkin Museum), who was trained as an architect, defended his doctoral thesis *The Fortifications of Ancient Bosphorus*. Here his paper 'L'apport de la fortification à l'histoire du Bosphore antique' (167-177) summarizes the main conclusions of his work. The Bosphoran Kingdom was situated on the two sides of the Straits of Kerch (called the Kimmerian Bosphorus in antiquity). Its territory was extensive and it comprised both native populations and a fair number of Greek towns, among which Pantikapaion (Kerch) was the leading city. The kingdom had come into being ca 480 B.C. as a bulwark against the raiding Scyths of the steppe. There are five subjects in Tolstikov's paper: (1.) long field walls; (2.) the fortifications of the city of Pantikapaion; (3.) the fortified town of Tanais; (4.) a region protected by a chain of forts; and (5.) architecture, particulars.

One long field wall is the wall of Uzunlarskij on the Crimean peninsula; it is over 36 kilometres long (fig. 161, on the extreme left). The field wall of Tyritake, also on the Crimean peninsula, is 25 kilometres long (figs. 190 and 192); on the outside there is a ditch, 15 m. wide, 5 m. deep. The latter system protected the urbanized coastal areas around Pantikapaion against the Scyths. It may date back to ca 470 B.C.

Pantikapaion itself is an excavation project of the Pushkin Museum of Moscow, after intermittent earlier work in the years 1820-1858 initiated by P. Dubrux. The trace of the city wall can be established, fig. 198 and Atlas Plate 9 (A 53); date: third-second centuries B.C. There is a series of forts on the acropolis ridge. The colonial town of Tanais near the mouth of the River Don was an exposed settlement founded in 300-275 B.C. There is a square main fortress – one side is ca 200 m. long – surrounded by a wall with towers along its circuit. Against it another, smaller, quadrangular fort was built, also surrounded by a fortification wall, fig. 196. We are dealing here with the three centuries of the Hellenistic period. The outer ward may have been inhabited by a dependent population group. I believe that such compact garrison towns perhaps constituted a type that is also found elsewhere in the Graeco-Roman world. One could compare Olbia to the East of Massalia<sup>16</sup>, the *castrum* of Ostia at the mouth of the River Tiber<sup>17</sup>, and

Iluraton, the frontier town built ca 50 B.C. (Crimea), fig. 170 and Atlas Plate 9 (A 54).

A chain of eleven forts existed along the coastline of the former island of Fantalovskij, which is the North-Westernmost part of the Taman peninsula to the East of the Straits of Kerch; figs. 171, 205-209, featuring the sites of Batarejka and Patraios. This coordinated defence system was operational from the second half of the first century B.C. till the beginning of the second century A.D., the time of the Emperor Trajan. The forts were surrounded by ditches; their walls rose on a socle of clay, and large mudbrick tiles constituted the construction material, stone being scarce in this region. Frames of beams reinforced the walls. For one gate of Patraios Tolstikov reconstructs a portcullis (*katarrhaktes*) as Lordkipanidze does for the Vani entrance gate (181; see below)<sup>18</sup>. In the Bosphoran Kingdom city walls, fortress walls and the long field walls were usually provided with a moat. On the whole, as time passed, curtains and tower walls tended to become thicker. The sprawling circuits of *Landschaftsstädte*, like those of Syracuse (Atlas Plate 2 [A 9]), of Hellenistic Chalcis-in-Euboea<sup>19</sup>, of Erythrae (Atlas Plate 8 [A 44]) or of Hellenistic Ephesus (Atlas Plate 8 [A 52]) are not in evidence. In sum, though largely in a Hellenic tradition, there are some local features in Bosphoran fortification construction, for instance the long Crimean field walls and the mudbrick walls to the East of the Straits of Kerch. Excellent plans and reconstruction drawings are part of this study, which offers useful references to earlier Soviet publications. Tolstikov embodies a tradition which is usually associated with Germany, that of the architect-archaeologist – the names of Krischen, Marzolff and Kienast spring to mind<sup>20</sup>. To the East of the Black Sea, in the country called Colchis in antiquity, the inland hilltop site of Vani overlooks a fertile valley which branches off from the main West-East axis and highway of present-day Georgia. Its documented history spans the period from the eighth-seventh centuries B.C. to the middle of the first century B.C. Being protected by steep falls on almost all flanks it only needed a defence wall on the

<sup>15</sup> Xenophon used the word for the small fortified Boeotian country town of Kreusis (*Hell.* VI, 4, 3). For the archaeological situation see Gauvin and Fossey 1985, reprinted in Fossey 1990, 157-168.

<sup>16</sup> Discussed in the volume under review by J. Couprie (Hyères) 'Les fortifications d'Olbia de Ligurie, propositions, questions' (389-399), fig. 84 and Atlas Plate 7 (A 33).

<sup>17</sup> Rebuffat 1974; proposed construction period: 350-340 B.C.

<sup>18</sup> For an interpretation of the Fantalovskij sites see also 86, 89 (A. Wasowicz).

<sup>19</sup> Bakhuizen 1972.

<sup>20</sup> J.-P. Adam (Paris) is another example.

Northside, where access was easy. Fortifications were built here in the third century B.C. (at that time the settlement was a temple-city)<sup>21</sup>. O. Lordkipanidze (Tbilisi) reports on them (179-184); plan of the site with its defences fig. 222, plan of the defences themselves fig. 223. Excavations uncovered an entrance gate of the courtyard type, narrow and axial – for pedestrians and pack animals –, and an adjacent military battery with a semi-circular and an hexagonal tower at its far ends. To the rear of the 2.80 wide curtain between the towers just mentioned – its length is 15 m. –, in the lower parts, were casemate-like storerooms for ammunition and for stocks of food as is demonstrated by the discovery of stone balls and amphora remains. There is a second wall, 1.25 wide, on the inside. In some respects the situation is reminiscent of the 'Große Batterie' which is contiguous to the *acropolis* of Demetrias, Thessaly, Greece (the length of that battery was 151.85 m.; there were large towers at the far ends)<sup>22</sup>. The stone balls found at Vani are of various diameters, from 11.5 to 30 cm. The battery system was probably covered by a wooden floor, more than 6 m. wide, so that catapults could be mounted on it. The great number of roof tiles proves that the battery was entirely roofed-over. Balls and amphoras were also stored in the hexagonal tower. Vani was not a Greek city, and local archaeological elements are distinctly present, but its defensive potential was clearly influenced by Greek engineering of the Hellenistic period.

The last few decades have witnessed a remarkable increase of studies about the *Phoenician* endeavours in Sardinia, Sicily, Africa and Spain. All these regions were represented at the Valbonne symposium. In his paper 'Osservazioni sulle fortificazioni puniche in Sardegna' (229-240) G. Tore (Cagliari) points out that in Sardinia fortifications of Phoenician-Punic origin have been identified in a considerable number of locations, the majority of them in the Western and Southern parts of the island, fig. 68. There are urban systems (Tharros, Sulci, Bithia, Nora, Karales), fortresses (e.g. Monte Sirai and Pani Loriga), and small or larger 'defensive systems'. Chronology points to the fourth century B.C. and before. After the earlier work by Barreca (1978) Tore now updates knowledge of the subject, especially on Tharros, Sulci and Monte Sirai. Barreca and Tore thus open up a new field of studies where comprehensive conclusions and answers to questions of dating are in most cases still beyond reach.

After earlier excavations along the fortifications of the Phoenician-Punic island city of Motya by J.I.S. Whitaker and B.S.J. Isserlin, A. Ciasca (Rome)

presents a report on the recent research project 'Fortificazioni di Mozia (Sicilia), Dati tecnici e proposta preliminare di periodizzazione' (221-227). The defence walls, which show many repairs, surrounded the island. From the beginning towers stood along the circuit of the wall. Four main phases can be distinguished, but absolute chronology is difficult to establish. Was the sixth century B.C. an important construction period<sup>23</sup>?

In 'Fortification punique: les murailles de Kerkouane' (241-250) M. Fantar (Tunis) offers a discussion of a Punic city on the coast of Cape Bon, Tunisia, where large scale excavations are being carried out. There is a double city wall, which is well-preserved in its lower parts. It probably dates back to the first half of the third century B.C. A ca 10 m. wide corridor runs between the inner wall and the outer wall. There are towers, stairways, casemates, gates and posterns. This city, which had developed in flat country, was destroyed in the third century B.C. The enemies came from overseas: the Syracusans (Agathokles), and later the Romans. There were also other fortified Punic cities on Cape Bon; their archaeological exploration has hardly begun. In his paper on Spain 'Les fortifications préromaines de l'aire ibérique' (213-219) P. Rouillard (Montrouge) does not make mention of Punic fortifications.

There are many other significant contributions in the book but not all local and regional case studies need be summarized here. I shall mention a few papers that are of a more general interest. In 'Inschriften und Festungsbau' (299-304) F.G. Maier (Zürich) summarizes his two volume work dealing with inscriptions and fortifications (1959, 1961). He argues that inscriptions can only slightly widen our horizon: they often refer to local and special circumstances; therefore, generalizations are usually impossible. Inscriptions do, however, provide information on matters of vocabulary, on details of technical engineering like the construction of gate leaves<sup>24</sup> or on the use of mudbrick and its coating. The subject enlightened most is finance. There is plenty of epigraphical material on donations, and on contributions of money in the form of loans. Another general paper is that of P.

<sup>21</sup> For a comprehensive description of the site see Lordkipanidze 1991, for the temple-city 184-194.

<sup>22</sup> See the plan 'Demetrias, Großes Bollwerk' in Marzollf 1980 (this volume contains a precise archaeological map of the remains of the fortification wall of that city) or Marzollf 1975, 49 and Sheet 2.

<sup>23</sup> For the city itself see Isserlin 1982; plan: 118.

<sup>24</sup> For new archaeological evidence on the construction of gates see Reinders 1988, 51-107, The Enceinte of New Halos, esp. 95-103 (acropolis gate); plan of the city in pocket.

Ducrey (Lausanne) 'Les fortifications grecques: rôle, fonction, efficacité' (133-142). Though the total cost of an *enceinte* has never been calculated, a balance of costs can be drawn up by looking at the ratio between cases in which the defence of a city was successful and cases in which it failed. The author lists sieges of cities for the period of the Peloponnesian War (431-404) and he reaches the conclusion that cities were rarely stormed and that sieges often did not succeed. Consequently, city walls might have had a dissuasive function. Attackers tried to circumvent the need of assailing a fortified town by resorting to ruses or by instigating betrayal inside the city. In sum, granting the costliness of building a city wall, possessing an *enceinte* appears on the whole to have paid.

Three further papers, each of them concentrating on the technical aspects of city wall construction, are of great interest. Their subjects are the raw materials in construction, and the measurements of the final products. J.-C. Bessac (Montpellier) in 'Approche des problèmes posés par la construction des remparts grecs en pierre' (273-282) takes the building stones of the fortifications as his subject. His field work centers on the Provence (France), where indigenous, Greek and Roman sites are at present being investigated with particular attention to this type of research. Many new questions are asked – for instance, what was the ratio between the amount of stone quarried and the amount used in the end in construction –, and answers or estimates are often possible. First, the quarries have to be located; aerial photography can be helpful here. Then the quarry site has to be studied meticulously, and if possible, partly excavated, see figs. 99-100, plan and cross-section of a quarry. Inside the quarry the archaeologist may identify the place where the blocks were prepared for transport, the place called 'work floor' or 'atelier'. The ancient quarrymen may have been itinerant artisans. In the La Couronne quarries of the Greek colonial city of Massalia, Gaul, they had built temporary dwellings in a part of the cavities that was no longer exploited (Lagrand 1959). It may also be rewarding to study how the stones were transported, to search for ruts of waggon wheels, for roads built specially with a view to stone transport, for retaining walls as parts of them, for embankments<sup>25</sup>, for platforms and quays where stones were loaded and unloaded. Here too aerial photography can guide the field explorations of the archaeologist. Finally, a fortification and its constructional flaws cannot be studied optimally without taking into account the building stones, the tool marks on the stones or the wedge slots still visible in the quarries or on the stones<sup>26</sup>. Personally I am of the opinion that this

type of study which is of a practical character yields the best results in present fortification studies. In our publication of the Goritsa site (1992) we have tried to work along these lines (51-79, 98, 123) but Bessac, because of his technical background, decidedly probes deeper.

Another innovative study is that by G. Hallier (Marseille) 'Pierre de taille et mesures normalisées: les enceintes hellénistiques d'Apollonia de Cyrénaïque et de Massalia' (251-271) with many footnotes and a rich bibliography. In this contribution poliorcetics is not treated; its subject is the high degree of planning and of standardization in ancient fortification architectonics. Hallier shows a preference for the ancient technical terms – *bas-mos*: plinth, socle; *domoi*: layers, courses; *metapyrgia*: curtains; etc. – and for the technical vocabulary of stonecutters and masons. The sites studied by him are Apollonia, the seaport of Cyrene, fortified in Early Hellenistic times (third century), and the harbour defences of Massalia, Gaul, of Late Hellenistic times (ca 100 B.C.). Survey plans of the two sites were made recently, Apollonia, fig. 109, Massalia, harbour, fig. 110. The author argues that reconstructing the ancient metrical modules – the ideal modules – should receive as much attention as reporting precise archaeological measurements. There is no doubt that the original modules can usually be found, in multiples of feet or, more often, of cubits (*pecheis*), a cubit being one-and-a-half foot, as remarked above. On both sites the Ptolemaic (Royal Egyptian) or Ionic foot of 0.35 m. and a cubit of 0.525 m. could be ascertained as the units of measure. The following multiples of cubits were found: 5, 15 (also 15 + 1), 20 (and 20 + 1), 40 (and 40 + 2). The width of the city wall of Massalia is 5 cubits. The fortress wall of Goritsa, which is in Doric feet (see Bakhuizen [coord.] 1992, 165), has the same width. At Apollonia the width of the wall is 10 cubits. The building stones – both systems were made of ashlar masonry – followed patterns of standardization too; a similar standardization has been established for the tiles of the mudbrick walls in Central Asia (see below). Feet and half cubits (*spithamai*) appear to have been the metrical units in stone masonry at Apollonia and Massalia.

<sup>25</sup> See for instance the book on the Goritsa city, Bakhuizen (coord.) 1992, 181 (Street D, Westend): "... an elevated road surface. This elevation extends ... towards the quarries ...," with Sheet 4. The subject of the transportation of stones after being quarried – on waggons drawn by teams of oxen – is treated by Raepsaet 1984.

<sup>26</sup> As was done recently for Saint-Blaise, the fortification wall of which is discussed in the book under review on pages 401-406 – for a plan see fig. 94 – : Bessac 1980.



Like Bessac, Hallier recommends that the incised marks of the ancient masons be studied carefully. The wreck of a ship transporting marked building stones from the La Couronne quarry to Massalia has been identified. The analytical approaches of Bessac and Hallier may be extended to other fortification systems, to those already published and to those coming under investigation in future.

Thirdly, the paper 'Observations sur les remparts de brique crue d'Aï Khanoum et de Doura Europos' (289-298) by P. Leriche (Paris) and O. Callot (Lyon) is a first step towards a theoretical analysis of mudbrick tile construction and of the labour forces needed for building the large fortified cities of Central Asia. According to the authors the study of mudbrick architecture is less developed than that of building in stone. For instance, what do the letter marks and ideograms on mudbrick tiles (see e.g. fig. 299, Maracanda) really indicate? The answer to the question is not yet known. The Greeks appear to have preferred mudbrick tile construction to building in *pisé* and to have introduced the marks on the tiles, in Greek letters. At Ai Khanum the mudbrick tiles are of standardized proportions: 5 square palms (*pala[i]stai*), one palm thick (there are four palms to a foot). Such a tile weighs forty kilograms. The authors estimate that the work force capable of building the imposing fortifications of the city of Ai Khanum in two seasons consisted of 4,000 men, half of whom were engaged in the fabrication of the tiles and in their transportation (plan of the site: Atlas Plate 16 [A 87]; also figs. 239, 310)<sup>27</sup>. Walls made of *pisé* and of mudbrick tiles needed constant maintenance. These walls were lined with a brilliant, white coating that needed to be repaired or repainted every year. Major repairs of the fortifications were undertaken more than once. Sometimes a wall was razed completely and rebuilt anew. It was the raw material used, not fear of an enemy, that occasioned these repeated labour investments. For photographs of walls built of sun-dried mudbrick tiles see fig. 295, Maracanda, figs. 301 and 302, Maracanda, fig. 315, Ai Khanum, and fig. 314, Dura-Europos.

Another field of study which is developing at present is that of Byzantine defence systems. A first attempt at a historical sketch was published recently (Lawrence 1983). At the conference of Valbonne J.-M. Spieser (Strasbourg) contributed a paper 'Philon de Byzance et les fortifications paléochrétiennes' (363-368) discussing some aspects of the early Byzantine fortifications of Thessaloniki (which are tentatively dated by him around 450 A.D. [Spieser 1974]) and of a siege of the city by Slavs. It is remarkable that certain features of the practice of early Byzantine defence

followed the prescriptions of the Middle Hellenistic author Philo of Byzantium (*Syntaxis Mechanike*). Spieser wonders whether the *pax Romana* had caused stagnation in Greek technical thinking, with the result that Greek-speaking early Byzantine engineers fell back on the latest handbook available in Greek, that of Philo. During the siege of Thessaloniki of 614 the Slavs threatened the harbour region. The inhabitants of the city constructed traps on the shore, sank caissons in the harbour which were equipped with oblique spiked rods, and blocked the harbour entrance with a chain and with a line of ships that were tied to each other by means of anchors. For all of this parallels can be found in Philo. Triangular and pentagonal towers are a characteristic of Byzantine fortification. This particular shape of the towers of Thessaloniki – they are triangular<sup>28</sup> – is also what Philo recommended; so were ditches and *proteichismata*, both of which have been ascertained for Byzantine Thessaloniki.

The article by R. Rebuffat 'Les fortifications urbaines du monde romain' (345-361) is enlightening, as much for the Roman world as it is for the Greek. To begin with, one is surprised to learn that general theoretical works as have been written for Greek fortification archaeology by scholars like Maier, Winter, Garlan, Lawrence and Adam or through the medium of this conference of Valbonne are virtually absent in Roman fortification studies; evidently the subject is too large<sup>29</sup>. Rebuffat outlines what is to be done, by defining the research targets. The author mentions the scarcity of well-dated sites, and points at the lack of poliorcetical commentary in archaeological publications. In his view texts of historians, epigraphy, and stratigraphical probings should be the foundations on which to build a comprehensive treatment of the subject – I would add archaeological *surveys* such as that of the town of Cosa<sup>30</sup>. Rebuffat remarks that a rough periodization is possible: (1.) the Roman Republic; (2.) the *pax Romana* of the Principate; here the author does not follow the theory of domestic insecurity; instead, he proposes to look for the motivation of city wall building in the manifestation of imperial power and in the expression of local urban pride<sup>31</sup>; (3.) the period of

<sup>27</sup> For a compact description of the fortifications see Leriche 1990.

<sup>28</sup> For another recently documented example of triangular towers see Reinders 1988, 175-178, The Byzantine Fort, for a plan fig. 102. For an example of pentagonal towers see De Boer 1988-1989 (Bulgaria; plan of the fort and excavation report).

<sup>29</sup> See, however, the informative survey of Lander 1984.

<sup>30</sup> See Brown 1951, 28-58, Fortifications, with Plates 2 and 3, and Brown 1980, Town Plan.

<sup>31</sup> On problems of imperial fortification policy see Isaac 1990.

anarchy (238-285); (4.) the period of recuperation (285-305): by the end of that period most city fortifications had been built; and (5.) the fourth and fifth centuries, during which the building of fortresses and of city defences continued (along with repairs)<sup>32</sup>.

Rebuffat's paper, with its excellent footnotes, offers many points of reference and comparison. The author asks attention for interests beyond the architectonical, taking into consideration the political context, the local circumstances and the cultural heritage; he also has an open eye for the *Nachleben* of a fortification. In this paper a historian is looking at a technological complex. When reading Rebuffat's contribution one realizes that in Greek fortification studies some subjects have hardly been explored to the full, for instance 'kings and the building of fortifications', or, to some extent, 'the manpower needed to build a fortification'<sup>33</sup>. In addition, linear defences of the type of Hadrian's wall deserve to be studied *sui generis*. For the Greek world one may think of the long wall at Iasos<sup>34</sup>, or the field wall built in haste by Antioch III the Great at Thermopylae (191 B.C.; unpublished)<sup>35</sup>, and the long field wall formerly explained as the city wall of Pagasai<sup>36</sup>.

Because of its broad ramifications attention may finally be drawn to the paper by M. Lenoir (Rome) 'Le camp romain et l'urbanisme hellénistique et romain' (329-336) which investigates the relations between fortified Roman camps and the planned, fortified towns and cities of the ancient world. First, the origin of the Roman camp is discussed. Its plan was certainly in agreement with the frequently recorded orthogonal lay-out pattern in Mediterranean urbanistics. It also reminds us of the small but regular *castrum* of Ostia (Lenoir) and of the so-called fortress (garrison) towns of the type of Ligurian Olbia<sup>37</sup> or of Crimean Iluraton (SCB)<sup>38</sup>. Orderly arranged camps were already known to the Greeks, and were apparently not quite a Roman invention<sup>39</sup>. A second, equally important subject discussed by Lenoir is the similarity of the plan of the *principia* – headquarters – of Roman camps and the lay-out of *fora* in Roman cities. He wonders whether in Roman city planning the architects were inspired by military models, Rome being a military state and the power of the Emperor and of high officials seeking symbolic expression precisely through the *principia* and the *fora*, centrally located places where their statues were on display. Lastly, it is shown that *veterani* enjoyed high social status in *canabae*, the civilian habitats contiguous to Roman camps; these *canabae* were under the supervision of the military. In the Magreb many a town grew out of *canabae* of army

camps, becoming walled itself in due time. These are issues worthy of study, though the situation varied from province to province. I believe that it will also be useful to compare the military and the civilian fortified sites of the Greek world.

In sum, the informative book presents its readers with plans of a number of fortified ancient settlements, Saint-Blaise near Massalia, fig. 94, Ligurian Olbia, fig. 84, Velia, fig. 59, Moio della Civitella, near Velia, fig. 62A, Goritsa, Thessaly, fig. 130, Aghios Andreas, Siphnos, fig. 154, Melie, Ionia, fig. 153, Histria, fig. 211, Maa-Palaiokastro, Cyprus, fig. 274, Apollonia, Cyrenaica, fig. 109, Iluraton, Crimea, fig. 170, the field wall and city of Tyritake, Crimea, figs. 192 and 193, Tanais, fig. 196, Maracanda, Sogdiana, fig. 287, and Ai Khanum, Bactria, figs. 239 and 310, with reports on excavations and with discussions of archaeological and structural detail of *enceintes (passim)*, with summaries of research in building materials, their transportation from the quarries and their standardization on the construction site (the contributions of Bessac, of Hallier, and of Leriche and Callot, see also the remarks by D. Adamesteanu on South Italy and Sicily 105-110), with expositions about the use of offensive and defensive artillery (McNicoll 305-313; the fortifications of Vani: 179-184; the Goritsa fortress: 315-321), about the costs and cost-effectiveness of urban defences (Ducrey 133-142; Maier 299-304; contrast: McNicoll 309-310),

<sup>32</sup> See Johnson 1983 (a book dealing mainly with the Western Empire) and Christie 1991.

<sup>33</sup> See, however, the book reviewed here 135: ca 1530 work-days for building a tower of the city wall of Kyzikos (inscription; cost of the tower 9,200 *drachmai*); 169, n. 14: 4,000 workmen, or 40,000 work hours per day, over a period of one-and-a-half to two years for building the long field wall of Tyritake (estimate); and 292-293: 4,000 workmen for two seasons (the city walls of Ai Khanum; estimate).

<sup>34</sup> F. Krischen, *AA* 1913, 475-476 (report of a lecture on field work); Bean and Cook 1957, 100-105; Winter 1971, 103, fig. 77, and 241-243; Lawrence 1979, 184-187; Adam 1982, 234.

<sup>35</sup> Livy XXXVI, 16, 1-2 (*cum duplici vallo fossaque et muro etiam*), Appian XI (*Συριακή*), 18 (*τείχος ... διπλοῦν*); Pritchett 1965, 79-80.

<sup>36</sup> *RE* s.v. Pagasai 1, Thessalische Stadt (Vol. 18, 2), 2299-2303 with plan at 2287-2290. The wall does not enclose an urban area, see Marzloff 1986, 381-382, Marzloff 1988, 27-28 and Marzloff 1992, 338-340 ('Demetrias I').

<sup>37</sup> Olbia is mentioned in Strabo IV, 1, 5, p. 180C and IV, 1, 9, p. 184C; see also the book reviewed 389.

<sup>38</sup> Another site to be taken into consideration is the Mιούπολις fort on the Attic-Boeotian border; for a plan see *CalifStClAnt* 11 (1978), 235 (E. Vanderpool), for a recent description Lauter 1992, 81-84, The fortified deme of Oinoe (Myoúpolis), updated plan at 83.

<sup>39</sup> For Greek military camps see Reinders 1988, 181-182, 202, cf. 185 (Alexandria-on-the-Jaxartes). Discussing Halos, the author wonders whether it was the Macedonians who started building camps of an orthogonal lay-out.

with expositions about the spread of Greek fortification technology beyond the regions actually inhabited by Greeks and Macedonians (here the paper by H. Tréziny [Aix-en-Provence] 'Les techniques grecques de fortification et leur diffusion à la périphérie du monde grec d'Occident' [185-200] is of relevance, hesitatingly bringing up the question of itinerant Greek architects and groups of workmen), and with expositions about indigenous traditions of city fortification construction before the Greeks and the Macedonians arrived, as was the case in Central Asia, with expositions about Punic-Phoenician defence technology (Ciasca 221-227, Tore 229-240, Fantar 241-250) and finally with a comparison with research in Roman fortification and defence (Rebuffat 345-361, M. Lenoir 329-336) and with a discussion of Byzantine fortification practice as an inheritance of the Greek tradition (Spieser 363-368). In spite of the wealth of material collected the book has a critical rather than an accumulative character. The success of the Valbonne meeting derives from its perspective. Throughout these proceedings questions of theory and of research targets are brought up. The volume signifies a further step forward in the study of Greek defence systems.

I shall conclude the review by pausing over a few *desiderata* in the archaeology of Greek defence (cf. the contributions of Y. Garlan [Rennes] 'Les fortifications grecques: bilan et perspectives de recherche' [15-21] and of P. Lévêque [Besançon] 'Conclusion générale' [377-379]). There is a great need for publications of extant *enceintes* through the method of archaeological *surveys* on sheets that bring out the relief in contour lines<sup>40</sup>. Bean and Cook made schematic plans of sites in Western Asia Minor (Caria)<sup>41</sup>. The monographs which were written on Miletus<sup>42</sup> and on Samos (Kienast 1978), and also briefer studies such as were made on Thessalian Eretria (Blum 1982) and on Lycian Kydna<sup>43</sup>, represent a more detailed and technical approach. Many remaining *enceintes* are in a phase of physical deterioration if not threatened by partial destruction. Fortification studies need a sizeable corpus of fully published sites as a data base. Archaeological *surveys* are less expensive than excavations, and the overall insights gained are usually broad. As many a lecturer at the conference observed, it is important to know when an *enceinte* was built, repaired or completely reconstructed. Unfortunately, for most fortifications some doubts remain about the chronology. Research strategies may be sharpened on this score. Decay and demolition of circuits are subjects hardly ever studied in their own right. This aspect of fortifications could yield information about the history of the walls but it may also be of interest in itself.

Certain components of fortifications merit special research. As an example I mention the *acropolis* or citadel. There are many types and many functions of *acropoleis*. As the citadel was an essential element of a Greek fortified city, insight into its functioning may lead to a better understanding of a city as a whole<sup>44</sup>. There is also room for looking more closely at the ideology associated with Greek city walls (Maier 299-300, Lévêque 378).

The subject of defence and fortification does not stop at cities. There exist a great many field forts and border defences, some of them perhaps planned or used as a system of control of a frontier<sup>45</sup>. Though some efforts are made in this book too little attention is paid to rural defences. Further, as remarked before, linear defences such as the wall across the isthmus of the Thracian Chersonesos<sup>46</sup> – unpublished and unexplored as far as I know – or the Tyritake wall featuring in the book – it protects the wider Pantikapaion *chora* and that of neighbouring towns – (169-170, fig. 192), are a subject in itself. The walls around the oases of Central Asia may be rendered in graphic form, on geomorphological maps. Then there is the subject of military signal towers. These are encountered everywhere in the Greek world<sup>47</sup> but

<sup>40</sup> In Asia Minor *survey* publications of fortified cities began just over a century ago with the pioneering work of the team of K. Count Lanckoroński, *Städte Pamphylens und Pisidiens*, Prague, Vienna and Leipzig 1890 (Vol. 1), 1892 (Vol. 2). The plans were made by the military geographer F. Hausner: Side, Pamphylia, Vol. 1 opp. p. 125, Termessos, Pisidia, Vol. 2 opp. p. 21, and Kremna, Pisidia, Vol. 2 opp. p. 161. Another memorable early achievement was the *survey* plan of the fortifications of Assos drawn in 1883 by F.H. Bacon and published by him in *Investigations at Assos ... 1881-1882-1883*, London, Cambridge, Mass. and Leipzig 1902, 13. In 1889 R. Koldewey measured the fortification circuit of Neandria, see *Neandria*, Berlin 1891 (BWPr 51), 6-11 and plan.

<sup>41</sup> Bean and Cook 1955; Bean and Cook 1957.

<sup>42</sup> Von Gerkan 1935. New map of the city: Bendt 1968.

<sup>43</sup> Adam 1982, 115-165, La forteresse de Kydna de Lycie, with excellent reconstruction drawings of the Hellenistic fort.

<sup>44</sup> Lawrence 1979, 126-143, Forts at cities, makes a start.

<sup>45</sup> North frontier of Attica: Vanderpool 1978; Ober 1985 and subsequent discussion: *Phoenix* 40, 1986, 370-372 (S. van de Maele), 42 (1988), 61-71 (P. Harding), 43, 1989, 294-301 (J. Ober); see also Camp 1991. Achaia Phthiotis: Wieberdink 1990 (intervisibility network: 66, fig. 2); alia.

<sup>46</sup> Hdt. VI, 36; Plut., *Life of Perikles* 19, 1, p. 163c; Xen., *Hell.* III, 2, 10; Procopius, *Περὶ Κτισμ.* IV, 10, 1-18 (four distinctive periods). The *makron teichos* was approximately seven kilometres long, Strabo VII, F55 Jones, Ptolemy, *Geography* III, 11, 6, Pomp. Mela II, 24, Pliny *NH* IV, 43 and 48.

<sup>47</sup> Krischen 1922, 41-43, Signaltürme (no. 78, fig. 35 at 45; see also no. 67, figs. 32 and 33); Tomlinson and Fossey 1970, 260-261, The Watchtower (reprinted in Fossey 1990, 148-149, 154); Bakhuizen 1985, 144-149, The Dhrakóspito Tower; Camp 1991. These references are only a small selection. In the volume reviewed here towers in the *chora* of the city of Chersonesos, Crimea, are referred to at 92 with figs. 183, 185-186, the reconstruction of a tower with five floors and a flat roof.



the subject is rarely approached in a general way, and the problems involved are major: problems of date and of contemporaneity<sup>48</sup>, of functioning and of belonging; there is also the question whether towers were part of a signalling network, or are to be associated with one single endangered site, a village for instance. Finally, the question of fortified farmsteads, receiving much attention at present<sup>49</sup> and also being touched at in this book (91-92; figs. 182, 184; Crimea), deserves perpetuation of analysis.

Fortification studies have matured to such a degree that great progress has been made recently and that directions of research have been clearly defined. The book under review is a work of great interest which every library of classical studies ought to possess. The committee who prepared the meeting of Valbonne and who saw to publication of the proceedings deserves our compliments for its initiative and for introducing a focus of technology in the contributions. The Greeks not only produced great philosophers and great artists; their military architecture too, in its heighday, was the most advanced to be found.

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<sup>48</sup> Fossey 1979, esp. fig. 4.3, La rade de Skroponéri et ses environs (reprinted in Fossey 1990, 185-200 with fig. 4), featuring tower and fort sites in North-East Boeotia with a proposed intervisibility system; it is not immediately clear if the hypothesis of simultaneous use can be confirmed in archaeological terms.

<sup>49</sup> The subject can be divided into various parts. First, there were farms of which the tower was architectonically an integrated component of the house itself, whereas in a second class the farm consisted of the elements a yard (*aule*), a detached tower (*pyrgos*) – either round or rectangular –, stables and sheds, and sometimes a house (*oikia*). Another aspect of these studies is that in the past farmsteads were sometimes not recognized as such in the archaeological record, the sites being explained as military towers or as forts. For the alleged fortified towers or forts of the Argos and Ephesus surroundings there may be another explanation than the views expressed in publications now current; Lord 1939 and Jobst 1978. On the whole rigorous criticism is necessary in this field. Bibliography: Grimal 1939; Young 1956; Radt 1970, 183-190, Pyrgos-Gehöfte; Pečirka 1973; Nowicka 1975; Haselberger 1972; Haselberger 1978 [1]; Haselberger 1978 [2]; Lawrence 1979, 187-197, 444-445 (towers of farmsteads and military towers are discussed together); Boussac and Rougemont 1983, 115-120, 235; Osborne 1986; Koutsoukou and Kanellopoulos 1990; Cherry, Davis and Mantzourani 1991 with plans at 144-146, 149-150, 153-154; Lohmann 1992; Mussche 1994; expected: L. Haselberger's monograph *Befestigte Turmgehöfte im Hellenismus (AM)* and H. Lohmann, *Pyrgos, Türme, Wehr- und Einzelgehöfte in Attika und der Megaris*.

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## Reviews

FELICE GINO LO PORTO, *Timmari: l'abitato, le necropoli, la stipe votiva*. Roma: Giorgio Bretschneider, 1991. XVIII, 232 pp., 92 pls.; 30 cm (Archaeologica; 98). – ISBN 88-7689-062-9; Lit. 680.000.

Timmari is one of the most important Iron-Age sites in the province of Matera, c. 70 km northwest of the present-day town of Taranto in southern Italy. It is a large, flat-topped hill that dominates the central part of the basin of the Bradano. This river rises in the mountains of Lucania slightly north of the regional capital of Potenza and reaches the Ionian Sea at the Greek site of Metapontum. The basin of the Bradano was one of the main links between the uplands of Lucania and the Ionian coast. Furthermore, it should be noted that a major tributary called the Basentello flows into the Bradano near Timmari. The course of this smaller river links the Bradano basin to the plains of northern Apulia with large and important pre-Roman (Daunian) sites, such as Canosa and Arpi. Timmari, therefore, is likely to have played a crucial role in the interregional exchange networks of Iron-Age southern Italy. The founding of Greek trading stations at or near the mouth of the Bradano (L'Incoronata, c. 700 B.C.; Metaponto, c. 630 B.C.) must have strengthened the importance of Timmari considerably.

This notwithstanding, the site is unknown to those who are not intimately acquainted with the ins and outs of south Italian archaeology, as precious few reports on Timmari have been put into print. The only truly substantial reports concern the late Bronze-Age to early Iron-Age urnfield [Q. Quagliati/D. Ridola, *Necropoli arcaica ad incinerazione presso Timmari nel Materano*, *MonAnt* 16 (1906), 5-166] and a fairly short, general report on the site's occupational history [E. Lattanzi, *L'insediamento indigeno sul pianoro di San Salvatore, Timmari*, in *Attività archeologica in Basilicata, 1964-1977, scritti in onore di Dinu Adamesteanu*, Matera 1980, 139-282].

Lo Porto's book on Timmari is meant to fill in part of this information gap. The book deals exclusively with the old finds excavated by the well-known prehistorian Domenico Ridola between c. 1900 and 1930.

Publishing old finds is often worthwhile, especially when they are well-documented since they may supply vital data concerning the past. If accurate documentation was still available for Ridola's excavations (which I doubt), the author does not present it. The tombs, for instance, are thus merely groups of artefacts in Lo Porto's *Timmari*: he fails to tell us with any certainty whether these tombs existed in splendid isolation, belonged to family groups or were a section of a more substantial necropolis, let alone inform us of the interrelationships between them and other burials of the same necropolis as regarding the spatial, chronological, and ideological aspects. The probably inevitable absence of this kind of information diminishes the value of the book considerably.

*Timmari* is divided into two parts. The first part gives a short survey of the site's history (pp. 1-9), presents a

series of burials (pp. 9-62) and contains short descriptions of the discovery and nature of votive deposits in an area called Lamia di San Francesco, some 120 m west of the hill of Timmari (pp. 62-69). The second part (pp. 73-225) is entirely dedicated to the artefacts found in the votive deposits; it is a catalogue, and a rather exhaustive one, at that.

The information in Lo Porto's passages on the site's occupational history does not differ significantly from that given by Lattanzi in her paper, cited above. Lo Porto has more to say on the prehistory of the site: other recent publications also prove that he is a specialist in this field. Both authors agree on the remaining part of Timmari's history: it was a fairly substantial and dispersed settlement in the (early) Iron Age, displays hardly any sign of human presence in the 5th century, flourished in the 4th century and declined rapidly after the Roman conquest in the 2nd quarter of the 3rd century B.C. This is more or less the standard history of native sites in south-eastern Italy. A recent and accurate publication on the nearby site of Gravina, however, has shown that the decline here was much slower: here human occupation continued to well within the 1st century B.C. [See A.M. Small (ed.), *Gravina: An Iron Age and Republican Settlement in Apulia*, London 1992]. The gap in the 5th century B.C., moreover, is probably more apparent than real. As far as I can see, it was caused by three factors. First, Lo Porto dated an important guide fossil, the colonial Greek cup of Ionian type B2, to the early to middle 6th century B.C. according to the Megara Hyblaea-chronology presented by Vallet and Villard in *MEFRA* (1955). At Metaponto, however, this cup was produced until about the end of the 6th century B.C. (D'Andria, *NSc Suppl.* 1975); it occurs in native contexts till about the second quarter to middle of the 5th century B.C. Second, the native pottery styles of the 5th century B.C. have not yet acquired diagnostic qualities. Third, the 5th century B.C. was a period of ferment in several parts of southern Italy: fairly small native tribes on the periphery of the colonial-Greek world clustered, because of their contacts with these Greeks, into larger and better organized political units such as the super tribes of the Lucani and the Brettii. This process of change may sometimes have entailed discontinuity of settlement (though certainly not at Timmari) and other evident signs of innovation and disruption of pre-existing patterns. It is, for instance, quite conceivable that 5th-century Timmari was a more contracted settlement of hillfort type which occupied only a part of the plateau that has not yet been investigated.

The second chapter of part I presents the tombs excavated by Ridola. The chapter gives descriptions and photographs of objects (fairly good) for only a selected number of burials. It would have been useful to have adequate documentation on *all* of the graves. Technical drawings of the objects are absent. The dating proposed by Lo Porto for the earlier graves is often too early (for reasons, see preceding paragraph). Several burials dated to the 6th century may, in fact, belong to the (now miss-

ing) 5th century B.C., for instance, the Montagnola tombs 6 and 10.

Chapter 3 of part I is, in fact, an introduction to part II. Its contents have been described above and require no further comment.

The catalogue of votive offerings which makes up part II of the book contains adequate descriptions and fairly good photographs of the objects. It is unproportionately large (pp. 71-225) as compared to the rest of the book. Together with its introduction (part I, chapter 3) and an interpretation of the finds (missing in the Timmari book) this catalogue could well have been a volume in Giorgio Bretschneider's *Corpus delle stipi votive in Italia*. Similarly, more substantial and more detailed information on all of Ridola's tombs or tomb groups (supplemented perhaps with the burials excavated in the post-Ridola era) could have formed the contents of yet another useful volume on Timmari's past. Lo Porto's volume on this site, however, has a bit of both of these unwritten books, but not enough to be truly convincing. And that is the main problem with the book: it contains a great deal of information on various subjects (e.g. the sanctuary), but often not enough to provide insight into the corresponding aspects of the site (e.g. religious activity).

Douwe Yntema

GIUSEPPE ANDREASSI, MIMMA LABELLARTE, GRAZIA A. MARUGGI, ANNA PATERA, *Ceramica greca della collezione Chini nel Museo Civico di Bassano del Grappa*. Roma: Giorgio Bretschneider, 1990. 113 pp.: ill.; 29 cm (Collezioni e musei archeologici del Veneto; 33). – ISBN 88-7689-052-1.

Unter den zahlreichen archäologischen Unternehmungen des Verlages Giorgio Bretschneider nimmt die Reihe "Collezioni e Musei Archeologici del Veneto" eine prominente Stellung ein. Die Reihe wird von Gustavo Traversari herausgegeben und zählt inzwischen schon siebenunddreissig stattliche Bände. Die Ausstattung ist verschwenderisch: jeder Band ist auf Glanzpapier gedruckt und die Fotos sind grossformatig, die Texte weit auseinander gesetzt. Es fragt sich ob ein solcher Luxus der Bedeutung des Inhaltes entspricht. Die Preise sind sehr unterschiedlich: z.T. moderat, z.T. excessiv. Der vorliegende Band ist Nr. 33 in der Reihe. Vorangegangen sind schon drei ähnliche Bände (die Nr. 14, 18 und 24) die ebenfalls Bestände aus dem Museo Civico di Bassano del Grappa bekannt machen. Giuseppe Andreassi, der Nr. 33 mitgestaltet hat, war auch schon für den Band 14 ("Ceramiche italiota a figure rosse della Collezione Chini") verantwortlich. In Band 18 hatte Filli Rossi noch einen anderen Teil der gleichen Sammlung ("Ceramica geometrica apula nella Collezione Chini") veröffentlicht. Man kann den vorliegenden Band also als eine Fortsetzung betrachten. Ein weiterer Band über "Ceramica italica, oro, bronzi e nuclei minori della Collezione Chini" ist geplant. Diese aufwendige Art eine ehemalige Privatsammlung bekannt zu geben, ist wohl eine Zeiterscheinung. Es wäre für den praktischen Gebrauch einfacher und für die wissenschaftlichen Bibliotheken erschwinglicher gewesen,

wenn man die Sammlung etwa in zwei Bänden zugänglich gemacht hätte.

Dazu kommt, dass die Sammlung Chini, wenn auch umfangreich, doch eine unter mehreren ihrer Art ist. Der Grundstock wurde schon vom Vater Lorenzo Chini um 1875 in Ostuni (Apulien) gelegt; der Sohn Virgilio Chini hat sie dann beträchtlich erweitert als er Professor an der Universität Bari war. Am Ende seines Lebens vermachte er diese ganz in Süd-Italien zustande gekommene, vor allem aus Keramik und Bronzen bestehende Sammlung dem Museum der nord-italienischen Stadt Bassano di Grappa, wo er geboren war und wohin er sich zuletzt wieder zurückgezogen hatte. Mag diese Verschiebung von Süd nach Nord und der Ort der Veröffentlichung zufällig und einmalig sein, die Sammlung als solche, wenn sie auch viele gute Stücke enthält, dürfte sich wesentlich kaum von den vielen ihrer Art unterscheiden, die im Laufe dieses Jahrhunderts in Bari und in Apulien entstanden sind (man denke etwa an die bekannte Sammlung der Familie Jatta in Ruvo di Puglia unweit Bari) und die im Museum von Bari aufbewahrt werden oder registriert sind.

Diesen eher negativen Erwägungen steht nun eine positive Tatsache gegenüber: die wissenschaftliche Qualität der Veröffentlichung als solche. Andreassi und seine Kolleginnen haben es verstanden eine umfassende, wohl geordnete, gut dokumentierte Beschreibung jedes einzelnen Stückes vorzulegen. Zunächst werden dreissig korinthische Gefässe von Grazia Angela Maruggi besprochen (früh-, mittel- und spätkorinthische sind vertreten). Genaue Herkunft und Kontexte sind in keinem Falle bekannt. Einige Stücke, wie eine hübsche (sogar in Farben abgebildete) Pyxis (Nr. 16), die von einem Künstler aus dem Kreis des Dodwell-Malers verziert wurde, ragen heraus.

Es folgen die attischen Gefässe, besorgt von Anna Patera, im ganzen achtundzwanzig Stücke, unter denen die üblichen schwarzfigurigen Lekythen und Schalen die Hauptmasse bilden. Heraus ragen ein Kolonettenkrater aus der Umgebung des Lydos (Nr. 2) mit Dionysos zwischen Satyrn und Menaden (c. 550, in Farben abgebildet) und einige Siana- und Bandschalen (Nr. 13, 14, 16-19). Ausnahmsweise konnte der Besitzer sich im Falle einiger Lekythen (Nr. 7-9) an den Fundort erinnern: Monte Sannace (Goia del Colle – Bari).

Zum Schluss werden von Mimma Labellarte drei schwarzgefirnisste Gefässe vorgelegt: ein lakonischer Krater, eine lakonische Oinochoe und eine attische Oinochoe des Typus 2. Man versteht nicht recht, wieso jetzt auf einmal eine Profilzeichnung, und zwar der attischen Oinochoe, hinzugefügt worden ist, während solche sonst (bedauerlicherweise) fehlen. Auch hätte man den verfügbaren Raum besser ausnützen können: jetzt ragt diese Zeichnung zwar sehr hübsch aber unökonomisch aus einer grossen leeren Bildfläche hervor. Es hätten dort mindestens vier Profilzeichnungen in kleinerem Masstab hineingepasst.

Übrigens ist der begleitende Text wieder gut informiert und gestaltet. Die mit Recht lakonisch genannte Oinochoe Nr. 2 vertritt ein bisher wenig dokumentierter Typus und ist daher wichtig. Dieser Typus (rundlicher Körper; breiter, niedriger Fuss; Kleeblattmündung mit

verdickter Lippe) wurde, wie manche andere lakonische Gefäßform, in Attika nachgeahmt. Das gilt wohl auch für die attische Oinochoe Nr. 3, datiert 450-430, für die es lakonische Vorläufer aus dem sechsten Jahrhundert v. Chr. gibt.

C.M. Stibbe

M.F. [JONGKEES-VOS, *Corpus Vasorum Antiquorum. The Netherlands; fasc. 7. Leiden, Rijksmuseum van Oudheden; fasc. 4. Leiden: E.J. Brill, 1991. X, 99 pp., pls. 162-215; 33 cm. – ISBN 90-04-09412-1. – \$ 183.00. – Hfl. 320.00.*

Four fascicules of the vases in the Museum at Leiden have appeared in less than twenty years, all from the hand of Mrs. M.F. Jongkees-Vos, and more volumes are promised. The Leiden museum may be grateful indeed to this scholar for devoting so much knowledge, energy and intelligence to the publication of its collection. It were to be wished that the great collections, such as, for example, in the British Museum, the Vatican Museum, or the Villa Giulia Museum were as fortunate in finding a scholar able and willing to take care of their *Corpus Vasorum*. Those who have worked on it know how taxing and ungrateful a task it is: the fascicules produced by Mrs. Jongkees-Vos are all, in one word, excellent.

The present volume contains the red-figured cups, skyphoi, a kantharos, some oinochoai and choes, an epichysis, some loutrophoroi and similar objects, an alabastron, some askoi, pyxides and lekanides; besides, there is another part of the museum's collection of black vases (see also vol. 3).

The drawings on the red-figured cups here published are, it must be said, inferior to those on the large vases published in vol. 3. However, as is usual with Attic vases, the potting is very good, in the case also of the more modest objects in this volume. As regards the inventory numbers used, the reader may be reminded that, as is explained in the first fascicule, RO means: bought by Colonel Rottiers between 1820 and 1826 (Greece and Asia Minor), and PC means: Prince of Canino, a great number of whose vases (excavated in Vulci) were donated by King William I in 1839.

The text is, as was to be expected, all but impeccable: there are full illustrations of the inscriptions, the descriptions are detailed and there are 128 section drawings (half size). Surprisingly, these drawings include complete section drawings of some gutti, figs. 101-106, and of three small ribbed amphoriskoi, figs. 126-128 (one wonders how these drawings were made). On the other hand, some other figures, e.g., fig. 100, are only in contours and figs. 13-18 give the outer contours of the feet only, though the wall of these skyphoi could easily have been drawn in (the reader is told that the wall of the skyphos of fig. 13 narrows at the bottom, which one would like to see in the drawing). And also fig. 19 gives nothing but the foot, whereas a full drawing of this fine oinochoe, including the inside of the transition between neck and shoulder (supposing this to be possible), would have been of great interest in view of the technical refinement of such delicate vases. Also the dinos of

pl. 192 deserves a section drawing. On the other hand, the drawings of bolsals, small bowls, salt cellars and the like (figs. 32-90) are very welcome. It would be impolite to doubt the accuracy of the drawings, but the wall of the cup PC 93 seems surprisingly wobbly in fig. 4, or is this due to modern repairs?

The plates are excellent and printed on luxuriously thick paper that will stand much wear and tear. The photographs seem slightly less distinct and clear than those of vol. 3, but this may be due to the different colour of the paper. On pl. 182 the photos of 1 and 2 have been interchanged. The pictures of profile-views and photographs taken from below and above, pls. 175-7, provide excellent comparison. For the sake of economy, the pictures of each single cup or vase, are scattered over different plates. This makes for rather less easy reading: for example, the cup of the first plate (hoplites in battle) is found on pl. 162, 163, 175, 178, 180; similarly, on, e.g., pl. 168 and 174, 3-8, the details of the scene are separated far from the main pictures.

Not all photographs have been taken at the right angle, and this causes unpleasant foreshortenings, e.g., on pl. 165 and in the athletes of pl. 172. 4-5: in such cases the reader cannot tell if the bad proportions are the fault of the painter or not.

As regards the text, there is very little room for anything but praise. The ordinary reader will, however, regret that the author has not been more liberal with her knowledge of the style and idiosyncracies of the individual painters, providing more often information such as is found, e.g., in the text on the Briseis Painter on p. 27 (pl. 185) and on the Sabouroff Painter (p. 15, pl. 169; here, however, the reader might have been told that the painting on this cup is cruder than is usual with this artisan: even the characteristically sprightly eyes are mis-drawn and the hands are uncommonly clumsy). Thus, for example, one would like to know whether the Painter of Villa Giulia 50508 habitually painted such extraordinarily expressive and widely dilated eyes as are seen on pl. 165 (on the other hand, the author does comment on the eyes of pl. 166, p. 10; here one may wonder if the scene on A should not perhaps be explained as a *dokimasia*). Further, one might wish for more information on the style of the Alkimachos Painter on pl. 167 (who preferred painting large vases) and of the Painter of Louvre G265, responsible for pl. 164, a weak rendering of the voting on the arms of Achilles, in which, strangely enough, all indication of the warlike circumstances under which this voting took place, is lacking; only "Odysseus" wears armour and handles weapons, all others are in civilian outfit (himatia and long sticks).

Sometimes an occasional question remains unanswered or the reader may disagree with the opinions expressed by the author. On p. 6 it is said (pl. 164): "the black relief lines have disappeared but they have left a groove in the surface of the vase; they must have been drawn with a sharp instrument or with a very hard brush". This seems very unlikely: relief lines have a surprisingly tough consistency and when they are peeled off, they may take with them a fraction of the surface to which they adhere, thus leaving a trace in the form of a hardly visible groove. (For the way in which relief lines were



probably drawn, see *Looking at Greek Vases* (1991) p. 240 and fig. 102).

On p. 10 we read: "On the lower part of the wall there are some scratches caused by a sharp object while the vase was being turned". However, these scratches seem to cut right through the lines of the skirt of Dionysos, which seems odd, for turning took, of course, place before painting (pl. 167). Incidentally, the maenads of this vase do not seem to wear *nebrides* (p. 11) but spotted panther skins (claws and tails).

The gestures in the scene on B of pl. 168 (Akestorides Painter) are unusual: B1 is holding both arms outstretched, his hands folded together; B3 is apparently entering on a quarrel, his outstretched left arm wrapped in his himation and menacing with his stick, while B2 is "making a long nose" at the level of his eyebrow with his thumb, the other fingers stretched. The scene seems odd: are there any parallels for the gestures of B1 and B2? As regards the cup by the Euaion Painter (pl. 170), nothing is said of the ugly eyelashes which look like sharp strokes starting at the upper eyelid and cutting through the nose (pl. 174, 9-11; compare the neat eyelashes on pl. 185.5 and 7).

More information might have been welcome as regards the ancient rivet holes through the stems of PC 89 and PC 82 on pl. 167 and 170: a sketch would have sufficed. On p. 18 (pl. 171, fig. 9) we read: "depression at the centre of the floor inside, made by the potter when he attached the stem of the bowl". This depression occurs on most wide cups, though it is not always observed and not always rendered in the section drawings. It is visible in figs. 8, 9, 10, 25 and 26 and may also be seen in large "closed" vases. It was probably produced in the last phase of throwing when, after the initial shaping of the bowl, its wall was bent further outwards into its final curve (see *Looking at Greek Vases*, p. 245).

As regards the curious attitude of the athlete on pl. 172.4, I wonder if he may not perhaps have fallen forward in practising the start, or having been suddenly interrupted in his movement forward because of an early start. There are one or two more details which raise questions: Athena's hand on pl. 187.1 (p. 27) seems all right to me, but I wonder whether the three horizontal lines round her waist are meant to indicate a girdle round the deep kolpos of her chiton.

We may end with a funny mistake pointed out on p. 43 and made by a painter on pl. 200.7: here the draughtsman mistook the black contour of the head for the mass of hair reserving it, thus producing a very large coiffure. In short, it is a pleasure to read and study the text, plates and drawings of this excellent fascicule.

J.M. Hemelrijk

K.W. ARAFAT, *Classical Zeus: a study in art and literature*. Oxford [etc.]: Oxford University Press, 1990. xvii, 225 pp., 40 pls.; 24 cm (Oxford monographs on classical archaeology). – ISBN 0-19-814912-3. – £ 50.00.

The subtitle of this book, *A study in art and literature* suggests more than is given in the book. In the words of

the author his concern is "with Zeus on Attic red-figure vases" and in studying these the versions of the myths are, of course, quoted from texts, but the figure of Zeus in literature is not studied in any detail (there is, for example, nothing to be found about the ludicrous way in which Aristophanes treats the Lord of the Gods in his *Birds*). Besides, the reader may expect comments on South Italian vases, but, unfortunately, these are not included. The subtitle should have been: "A study of the figure of Zeus on Attic red-figured vases of the Classical Period".

The catalogue contains some 375 vases, some of which, surprisingly, do not figure Zeus (see, e.g., p. 51, 53, 55, 58). The author warns the reader (p. 178) that the vases listed are only a small percentage of the Attic red-figure vases of the Classical period which were once painted with scenes including Zeus, since most of them have not survived. He adds: "I have preferred not to compile any statistics about the frequency of the occurrence of Zeus compared to that of other gods", a decision which some readers will regret.

It is stated (p. 163) that "a discreet and highly significant group of scenes" has been chosen. These are:

1. The Gigantomachy
2. Births (that of Aphrodite, Athena, Erichthonios, Helen, Hermes, Pandora, Zeus himself)
3. Trivial pursuits (?) (of Ganymede and various women)
4. Libations
5. The Introduction of Herakles: Herakles and Hebe
6. The Judgement of Paris
7. Varia (Europa, Danaë, Divine Vengeance — e.g., Salmoneus etc. —, Zeus and Athena, Zeus Alone, Eos and Thetis, Zeus and other gods, Rape of the Leukippids, Contest of Athena and Poseidon, Io and Argos, Pelops and Oinomaos, Zeus and Hera)
8. Conclusions

There are some 80 pictures on 40 plates (the paper of the copy under review being faulty, some of the pictures are badly spoiled; on pl. 5a, which is without caption, the wrong side of the krater 1.69 is printed). There is an index of the vases of the catalogue with references to the pages, an index of vases mentioned (but not listed in the catalogue), an index of literary sources and a general index.

The book is useful and well-organized but the subject does not allow for striking results (and one should perhaps forget that there exists another book entitled *Zeus*, the gigantic masterpiece by A.B. Cook). Some of the general conclusions are found in the last chapter, from which most of the following remarks are taken (my own comment is printed between brackets).

Scenes of pursuit and libation involving Zeus occur only on red-figure vases. On scenes of the early Classical period till about the mid-fifth century, Zeus is a participant in the scenes; he becomes a spectator in the Classical period (p. 166). At the same time the thunderbolt becomes less and less frequent and is almost completely absent from the later fifth century onwards, except in Gigantomachies. Zeus all but ceases to be active about 450 B.C. (p. 169); he usually sits in this period whereas he stood before.

It is unlikely, the author says, that we can be certain of the reason why a scene is suddenly introduced, becomes very popular for several decades and then is dropped; but the pursuit of Aigina, which reaches the height of its popularity in the 450's — Athens captured the island in 458 B.C. —, declines in popularity after that decade “because it had served its purpose” (p. 166). This (p. 78) is the only scene which is regarded by the author as having been used for political analogy. (Here, it may be objected, the pursuit of women by other gods and by men or youths, is perhaps not sufficiently taken into account. As for the appearance and disappearance of themes in general: is it possible to explain the erratic changes in modern fashions in art and clothing? New subjects may have been good for selling and the public is easily bored with repetition).

There “are cases where there appears to have been a feeling against an established scene (p. 166); for example, this could account for the lack of representations of the birth of Athena...”, strikingly few of which are to be found in Classical art: “the appearance of the scene in the east pediment of the Parthenon may have been the birth of Athena to end all births” because of its “revolutionary depiction on such a prominent monument” (I do not understand how this would hinder vase painters from painting the scene; but it is true that the clearest representations — the goddess emerging from Zeus' head (pl. 7-8) — are of a character too primitive to suit Classical taste, whereas a depiction such as that of the Parthenon would, without elaborate inscriptions, be hardly understood on a vase; cf. the discussion of 2.7 on p. 38-39, pl. 9).

That the contest of Athena and Poseidon makes its first appearance in the West pediment should “make us cautious about assuming that major sculpture would have a consistent effect on vase painting” (p. 166: here the reasoning is not easy to follow). The Gigantomachy was at the height of its popularity just after the Persian wars, and then there was a long period of loss of popularity (450 to 420 B.C.: p. 167); “perhaps the reason for this lessening of interest lies in the fact that it was now used for the Parthenon metopes” (again the author's meaning is not quite clear). A revival in the last twenty years of the century must, of course, “have been due to the metaphorical value of the scene” during the Peloponnesian war: there are no later examples.

It is pointed out that vase painting and sculpture are aiming at very different things (p. 168) and therefore it is dangerous to compare them: political relevance in art is very hard to prove. Yet, according to the author (p. 168), by the Classical period it was a desire on the part of some Athenian artists to introduce a political element into their work (which seems doubtful to me, though there are, of course, references to contemporary events such as the theatre and the wars — *e.g.*, in scenes of the departure of soldiers).

So far for an indication of some of the general conclusions. As has been said, the book is useful and instructive, but there is a certain naivety in the reasoning that one meets more often in discussions of this kind. Besides, there is from time to time a lack of precision in the descriptions and a definite tendency to over-interpret-

tation. Some examples of naive reasoning may here be given.

P. 35, pl. 7b: “Evidently Hephaistos has done his work and gone” (this in order to explain his absence in the scene: as if the picture is part of a movie; besides, the scene is by a bad painter and one should not try to impose a distinct interpretation on the gestures of the hands).

P. 49, pl. 11b: “Usually a female holding a thyrsos would be a maenad, but maenads are inappropriate at this stage of Dionysos' life” (this suggests that a painter would not allow himself to draw a maenad in the presence of a youthful Dionysos because it might seem an “anachronism” to us).

P. 55, pl. 12b: speaking about the wreaths in the hand of two Nikai on 2.24 the author argues: “both wreaths are rather large for him (the infant Erichthonios), but Kekrops and Hephaistos are wreathed ..., so the wreaths must be for the baby” (as if the painter should consider the size of the wreaths in the hands of flying Nikai).

On p. 172 it is said that: “the vase 5.8 shows an apparent mixture of the Parthenon and the temple of Zeus at Olympia” — which may seem so to us since nearly all monumental art of the time is lost, but it is, of course, virtually impossible that a vase painter should be influenced by the sculpture in two pediments so far apart in time and space and so badly visible compared to the wallpaintings daily seen in the stoas and in the market places. Though the author tells us (p. 178) that there is a risk of making too much of limited evidence, we read: “The fact that Ganymede (in the terracotta group in Olympia) is still holding the cock suggests that the actual pursuit is of little interest to the artist.” For further examples of what seems naive reasoning to me, see especially the discussion of the pursuit of Ganymede on p. 67-76 (incidentally, the young person asleep in the arms of a running god on 3.6, Schefold, *Göttersagen* fig. 296, is not certainly Ganymede).

Some examples of defective descriptions and hyperinterpretation should also be pointed out. P. 38 (2.25): Zeus (pl. 8a) is not “a credible, dignified figure”, but slumping with bent back on his throne and badly painted. The woman behind his throne (p. 37) can hardly be Hera because of her homely *sakkos* (more probably she is an Eileithyia); but even if she were, she should not be said to be “deliberately disrespectful” and “in mock wonder”.

Further, the description of fragments 2.4 (p. 35) is mistaken: to the left is a bearded god, not Hera (Schefold: Poseidon) and the bearded god —called Zeus here —, is probably Hephaistos (Schefold) because of his unmajestic, homely face and appearance (no wreath, no staff, short sleeve); Zeus seems to be lost and the Eileithyiai make gestures which are certainly not “calmer” than the others. I wonder if the inscription *Hera* reported here (above the head of Hephaistos), could be *HEPH(aistos)*. At any rate, it is not “possible to read the conflict between Zeus and Hera into both her gesture and her position behind Zeus” (p. 35).

On p. 57 the reader is not told that in “the discovery of Erichthonios on 2.28” the baby is supposed still to be hidden in the box in the centre of the scene. The double

Poseidon on 1.46 (p. 24-25) is no doubt a simple error of the painter. The presence of Poseidon on 2.6 does not need to be justified by a reference to his later contest with Athena (p. 36-37). P. 34 (2.2): the gestures of Hephaistos and Hera (?) are over-interpreted and only two figures are moving towards Zeus, two others are sitting and one is standing. The painter is a very bad one and the picture surely does not allow for so precise and detailed an interpretation as is attempted here ("lack of awe" etc.).

Though the author believes that it is very doubtful to regard 2.7 (pl. 9) as a birth of Athena, he includes it as such (p. 38-39); it certainly does not look like a *hieros gamos*: it clearly is a heated discussion on Olympus, such as are quite common in Homer and must have been plentiful in the lost epics.

Over-interpretation is also found on p. 42f (2.8), where 'Hera's pose is explained in terms of her own "thoughts" (p. 43): "so that she has no need to gesticulate or look concerned etc." Besides the Nike does not crown the seated god (who may well be Hades and not Zeus) but clearly flies towards the newborn child. The main figure in the upper half of the scene is certainly not the woman on the right side (Hera?) but rather the seated goddess with torches (Persephone), who is the pendant of the seated god. Too much is made of the expression on the faces in this scene (as, incidentally, in other scenes) and of the direction of their eyes, as the obverse of the vase shows (Schefold, *Göttersagen* fig. 80): here all figures look "worried" (as we might, erroneously, call it), their eyes gazing into the far distance (no doubt in an attempt of the painter to signify solemn pathos; Beazley calls his work "laboured and weak"). If "Zeus looks apprehensively at Hera" on B, all figures on A look apprehensively at —nothing!

The description of 2.16 (p. 48) is not up to date: there are more gods, and the nymphs are in the act of bringing a sacrifice at an altar; besides, the greater part of the heads of Zeus and Poseidon is lost (see Schefold, *Göttersagen* fig. 24).

A minor point is perhaps that the author seems to attach too much weight to changes that are in essence stylistic, e.g., the fact that the figure of Zeus becomes more and more relaxed (p. 170): this holds for all human figures and also for animals like horses and dogs. Similarly, there is, I believe, too much emphasis on the way in which Zeus may be sitting: such things are part of the development of artistic ability in the time of the Parthenon. Especially, the way of sitting in the "turning pose" is, I believe, wrongly used as a significant trait specially reserved to Zeus. "It distinguishes him from other figures, as he is the only one who regularly adopts it" (but some of his figures may not be Zeus at all — e.g., on pl. 35b — and great figures like the "Hestia" of the East pediment, Hephaistos, Dionysos and Apollo of the frieze of the Parthenon show that this is not true). The author believes that, since Apollo is sitting in this position on pl. 36b (6.6), the meaning is that Apollo may have been more dependent in this case on Zeus than normal: "his pose as well as power derived from Zeus" (p. 170). However, it is later remarked that: "It is to be remembered that the turning pose itself does not imply

command of the situation". In fact, it seems to me that it is no more than a new, successful and dignified means to bind a composition (of an assembly of figures) together. In the more or less misleading reasoning of certain passages (some of which have been pointed out above), it is, as it were, supposed that the draughtsman had a clear idea of the meaning of all details in his picture. For example, on 1.24 (p. 13) Athena, Herakles and Zeus "are aiming at the same giant ... since they have no other opponents." To this the painter might reply: "I have not drawn them in, neither have I the countless other giants: is this a reason to believe that they were not present in the gigantomachy?"

In actual fact a draughtsman did not always think of the questions his pictures might raise among his customers and especially among modern scholars with their immodest inquisitiveness. He would no doubt usually simply aim at a satisfactory picture, going primarily, I suppose, for the composition of what he regarded as the main elements and would subordinate all other considerations to this: "Since there is some space for a figure, I may put in an onlooker, an old man, a god, or Zeus, what you will". This does also hold, at least partly, for the more elaborate paintings which form the main interest of this book. The author rightly points out that among painters there clearly existed much "mythological literacy" (p. 3), but I am not sure that "It is (always) clear that Zeus is not just another god depicted merely to fill a space" (p. 5).

On the whole, however, though the author has not avoided the "risk of making too much of limited evidence" (p. 78), the book is more helpful and instructive than may perhaps be inferred from the critical remarks above. It will no doubt be used with much profit by all students of Greek iconography. In fact, the discussion is usually sane and convincing and sometimes the author may be almost excessively critical, for example, when he speaks of the reconstruction of cults and rites with the help of vase paintings, a study which is so popular with students of Greek religion: "I doubt whether any of the vase paintings discussed can be convincingly related to the cult of Zeus or shown to portray a part of the rite of the cult" (p. 6) and "the vase paintings bear little or no relation to religion" (p. 8): a prudent and interesting remark indeed!

J.M. Hemelrijk

GLORIA FERRARI, *I vasi antichi a figure rosse del periodo arcaico*. Roma: Giorgio Bretschneider, 1988. 196 pp., 99 pls.: ills.; 30 cm (Materiali del Museo Archeologico nazionale di Tarquinia; 11) (Archaeologica; 73). -ISBN 88-7689-009-2.

This is the eleventh volume in the series publishing the different collections in the Archeological Museum at Tarquinia. It contains 58 Archaic Attic red figure vases, some exceptionally fine and most of them well-known. Exquisite pieces are the rather fragmentary, very tall amphora by Phintias with Dionysos and, on the other side, Heracles and the tripod (pl. I-III), the huge cup by Olto with the assembly of the gods on Olympus and the



arrival (or departure?) of Dionysus on the other side (pl. IV-VII), the monumental calyx krater by the Kleophrades Painter with two powerful athletes and their youthful trainers (pl. XXXI-XXXIII), and the footless krater with Europa and the bull by the Berlin painter (pl. XXXVII-XXXVIII).

The vases come from two collections: the municipal collection (Raccolta Comunale, RC) and the collection of the counts Bruschi Falgari. Both collections were formed in the nineteenth century during the excavations in the necropoles of Tarquinia. Hardly anything is known of the tombs and contexts, but, the author tells us, future study of the “quadri” and “elenchi” in the archive may eventually lead to the reconstruction of a good number of tombgroups (p. 13; even now it is an interesting surprise to learn that the cup with the wonderful satyr by Epiktetos (pl. IX) served as a lid on an ash urn, a black figure krater, p. 29). The Bruschi Falgari collection was sold to the state in 1913. The two collections were united in 1916 in the Palazzo Vitelleschi.

The text is written with great knowledge and insight and the discussion of style, shape and subject matter is very thorough and enlightening. In fact, the collection is so good and the text so rich that a simple recommendation to study the book might perhaps suffice. Yet, the mere fact that there is so much to learn and that so many questions are raised and answered, inspires particularly critical reading and to show how varied the discussions are I will select one or two minor details on which one may disagree or want more than is given.

Discussing the erotic pelike no. 22 (pl. XXXIX) the author suggests that the scene on B may be the sequence of that on A. This tendency to assume that two or more pictures on a single vase may represent subsequent “moments” in a story may be natural in our time, but was far less customary in ancient Greece. The Greeks usually restricted themselves to representing a story (or an event in daily life) by means of a single picture. One should bear in mind that there was no word for ‘moment’ or ‘instant’ —*stigmè chronou* might have been used, but the concept was slow to develop. Further, the cock on the stand on A of the same pelike (pl. XXXIX) seems not ‘out of place’, if it is taken as a symbol of sexual potency (p. 85; but the author is right in stressing the comical aspect of the scene). It is also suggested (p. 86) that the ugly physiognomy of the *pornai* depicted here is meant to characterize their trade, but the Nikoxenos Painter and his followers do not seem to have been able to draw pretty females: as a rule, mouths are drawn in such a way as to suggest that a number of teeth are missing or that the jaws are not well-developed.

Almost throughout, the style of the paintings and their painters is discussed with unusual thoroughness and expertise; however, it might have been explained why it is that the two famous *symplegmata* pl. LXVIII-LXIX (nos. 38-39) are to be assigned to a single hand (the Triptolemos Painter’s): the scheme is very similar indeed, but the drawing seems so different in the details of faces and anatomy that the attribution to a single painter, though long established, requires some comment (for a close examination see the excellent pictures in Boardman and La Rocca, *Eros in Greece*, 1975, p. 114-115).

Interesting details abound: the menacing attitude of certain dancing komasts, which I used to regard as the beginning of a drunken broil (e.g., the figures A3 and A7 on no. 13, pl. XXVI.1, Epeleios Painter) are here explained, and no doubt rightly, as part of the *komastikè orchèsis* (p. 61), a dancing parody of a fight (but the half-empty wineskin of A6 should, I think, not be regarded as a reference to the *askoliasmos*-game). The stylistic analysis of this cup, its shape and the style of the Epeleios Painter and his brethren is no less instructive than are the comments on the other vases; yet, one may perhaps add that a remarkable feature proper to the Epeleios Painter is the easy way in which he creates arresting “negative” forms in the black background by the interplay of arms, legs and bending bodies (pl. XXVI.1). The tiny winged daemons on pl. XX, flying above two war chariots are regarded as the *kères* of Heracles and Cynus (p. 53), an interesting suggestion indeed. On the other hand, I cannot believe that, as is suggested by the author, the purses commonly offered to *hetairai* contained knuckle bones and not money (p. 148), though it is true that the large purse on pl. LXXXIV.1 looks rather like such a bag full of marbles, while the one on pl. XC, offered by a youth to a boy athlete, seems to be a small purse, which throws a doubtful light on the seemingly innocent little javelin thrower. Of course, there is much more that one would like to mention or discuss (e.g., to identify the warrior inside the Oltos cup, pl. VI, with Ganymede, seems wrong: p. 27), but the above must suffice as an indication of the scope and variety of the text.

There are 99 plates containing almost twice as many pictures (pl. III.2 and XXIX.1 are printed upside down). Some of these photographs are less perfect than the text, and so is the way in which many have been printed. Most of the vases have been published elsewhere, often in far better pictures and with more and clearer details; these are mentioned in the bibliography to each catalogue number: very good photographs are found, for example, in the books with pictures by Hirmer (the handbooks usually referred to as ‘*Arias-Hirmer*’, or ‘*Simon-Hirmer*’). Further, the vases with erotic scenes are beautifully reproduced in colour prints in Boardman and La Rocca’s book quoted above (nos. 9, 38-9, 49). Since the drawings by Reichhold have become rare, it would have been good to find reprints here, not only of no. 3 (Pfuhl, *MuZ* fig. 360), but also of no. 2. pl. I-III (the black bird in the hand of the maenad A1 is clearly seen). Many inscriptions on the vases (though not all, see nos. 2 and 3) are reproduced in drawings in the text and there are beautiful section drawings of all vases, printed (sometimes not precisely?) to a scale of one to three. These drawings are especially welcome because they give also the complete sections of more or less closed vases such as pelikai and other, larger pots: thus the extremely thin wall of the great one-piece amphora painted by Phintias (pl. 1) strikes the eye at first glance (p. 18); compare also, e.g., the pelike no. 22, p. 83 (4-5 mm!) and the thick-walled stamnos no. 26, pl. XLIV, p. 95.

Only rarely is an interesting shape not discussed; thus, the foot of no. 23, p. 87, pl. XL, deserves some comment: it is so unusual that one may perhaps wonder if it

belongs, for it is the only example known to me of this kind of stepped foot (with a sharp-edged, thinnish upper member) under a column krater (apart from a vase by the Leningrad Painter in Amsterdam, the foot of which, however, is flatter); this type of foot goes with amphorae type A (see no. 2, drawing on p. 18) and, with different proportions, volute kraters; but perhaps it occurs more often in the kraters painted by the Chairippos Painter? In short, this is an enjoyable book for everyone, for those too who are interested in bizzareries such as phallos-birds (see p. 22 n. 12) or the astonishing fakes, or rather reproductions, of the "Olympian" cup by Oltos, made long ago by one Antonio Scappini, painter at Corneto (see p. 22 n.6 and p. 28 n.26).

J.M. Hemelrijk

ERIKA SIMON, *Menander in Centuripe*. Stuttgart: Franz Steiner Verlag, 1989. 42 pp.: 16 pls.; 24 cm (Sitzungsberichte der wissenschaftlichen Gesellschaft an der Johann Wolfgang Goethe-Universität Frankfurt am Main; Bd. 25, Nr. 2). – ISBN 3-515-05429-4. – DM 28.00.

This essay contains an interesting identification of a scene on a polychrome Centuripe vase which is on loan from Japan in the Martin-van-Wagner Museum in Würzburg, and at the same time it throws light on a lost comedy by Menander, the *Theophoroumenè* or "Girl possessed by a God".

Up to the present, hardly any representations of comedy scenes have been recognized on Centuripe vases, but there can be no doubt that the eight vases here discussed illustrate such a scene. The vase published in pl. 1-4 is a tall pyxis on a slender foot with a domed lid, standing to a height of no less than 75 cm! The representation in the frieze recurs, with some variations, on the other seven vases.

There are four figures, which are described from left to right. This description is detailed but hard to follow: it is to be regretted that Miss Simon has not added drawings of what she believes to recognize on this and the other vases (pls. 5-9 are very vague indeed). The first figure, pl. 4, is wearing rather unusual garments, and their description is puzzling (p. 50). Surely, the person is shown frontally (and not from behind) and the outstretched hand is a left one? However, this figure, which may perhaps represent the lover on some of the other vases (see pl. 11.1), is not important for the recognition of the scene.

The heroine is undoubtedly the second figure from the left (pl. 2). She is hastily and clumsily stumbling along, as if falling forward headlong; she is wearing a short skirt (rare for females) and a scarf-like mantle, blown backwards from the right shoulder. Her left hand is said to be visible in front of her chin, but this seems very awkward, if not impossible. Like the other figures she wears a mask, closely fitting stockings and long sleeves (though here the sleeves are part of the garment, compare pl. 11.2). That she is a woman appears from the long hair falling on shoulders and back. She is storming past a standing, frontal person, who is identified as a

female fluteplayer, towards a masked tympanon player in a long garment, also provided with a scarf-like mantle blown backwards from the right shoulder (pl. 3); on p. 60 it is suggested that this figure represents a eunuch. Though many details of this and the other vases are far from clear, the identification of the comedy that is illustrated seems very attractive: it is the *Theophoroumenè* by Menander, a play dealing with a frenzied woman who is lured out of an inn with corybantic music, and afterwards seems to have been cured of her *mania*; finally and in true comedy fashion, the play ended with a happy marriage. That the woman is possessed by a god (probably Cybele) and thoroughly out of her mind appears from the way in which she is wildly stumbling along, and from her indecently short skirt.

The plot of the comedy is discussed with great knowledge and inventiveness. Other representations, such as the Dioskourides mosaic and the remarkable one from the House of Menander in Mytilene, are included in the argumentation. Incidentally, the curious combination of the possessed woman running past a standing *aulètria* in pursuit of a tympanon-player, which is repeated on the other vases (pls. 2, 5-6, 8-9), seems a fixed scheme inspired by a common model, not by a contemporary performance of the play; one would have liked to have the opinion of the author on the nature of this model. The Centuripe vases are of special interest for our understanding of Menander because they are closer in time to the poet's lifetime than the other representations. With this short essay Miss Simon has once more demonstrated her impressive literary and archaeological insight.

J.M. Hemelrijk

GERMAN HAFNER, *Die Laokoon-Gruppen. Ein gordischer Knoten*. Stuttgart: Franz Steiner Verlag, 1992. 55 pp., 37 figs., 21 pls.; 24 cm (Akademie der Wissenschaften und der Literatur. Abhandlungen der Geistes- und Sozialwissenschaftlichen Klasse nr. 5). – ISBN 3-515-06163-0.

Much has been written about the Laocoon, but with the present booklet Hafner believes he has definitively "cut its Gordian knot" (note the plural in the title). In the foreword the editor B. Andreae points out that the crucial question is whether one can decide if the carving of the Laocoon and that of the Sperlonga sculptures was, or was not, done in a single workshop, that of Agesandros, Polydoros and Athanodoros. He himself believes it was, but Hafner does not. The difficulty is, of course, that, since these sculptures are — in all probability — copies, the idiosyncrasies of the "hands" of the sculptors and the style of the originals are indistinguishably fused together. Andreae tells us clearly that he does not agree with Hafner's conclusions, but adds that Hafner's study is useful because it will inspire further discussion. Hafner starts with the famous but rather puzzling passage in Plinius *NH* 36.37. I do not understand his translation (p. 9) of "*multo plurium*" and "*quorundam*" but the rendering of "*statuariae artis*" with "Bronzeplastik" (as against "sculpture") is said to be correct; this trans-

lation is also given by D.E. Eichholz (edition Loeb, 1962) and vigorously defended by Andreae in *Laokoön und die Gründung Roms* (1988) p. 146. Yet it adds another difficulty: why should the Laocoon be compared to painting and bronze sculpture rather than to other marble statues? A further problem in the text is set by the words: “*de consilii sententia fecere summi artifices*” (see below).

Hafner believes that our uncertainty regarding the Laocoon is due to the existence of this passage in Pliny, for it caused what he regards as the great initial mistake: immediately after the statue was found (1506), Giuliano da Sangallo identified it with the Laocoon mentioned by Pliny, and this identification, so Hafner says, is wrong. Michelangelo saw at once that the group is not carved from a single block, as Pliny seems to believe, and, shortly after 1506, Pirro Ligoria pointed out that our Laocoon could not be the one described by Pliny since it was not found in the house of Titus but at no less than a kilometer distance from it: on the Oppius in (?) the so-called *Sette Sale* (and not in the *Domus Augustana* on the Palatine where one expected it to be found). Ligoria's objections were repeated by others after him, but later this criticism was silenced by Winckelmann's authority (p. 22). Hafner revives it.

According to the author, Pliny would surely have seen that the statue consists of several blocks (in fact, no less than eight, all of Parian marble except one on the off-side of the altar, which seems to be Carraran). To this it may be objected that Pliny probably never bothered to look narrowly at this (or any other) piece of sculpture (see below): at any rate, he loved to impress his readers with “*ex uno lapide*”; so, for example, a few lines above the mention of the Laocoon when speaking of a four-horse chariot with Apollo and Diana as “*ex uno lapide*” (NH 36, 36; also, probably, the Farnese Bull in NH 36, 34)!

According to descriptions of the time the statue was found in a “*camara subterranea bellissima pavimentata et incrustata mirifice, et havera murato lo usso*”. The last five words mean that the doorway was walled up, apparently to protect the statue against barbarians or overzealous Christians.

Thus it appears, the author says, that at a late date in antiquity the group was transported to the place where it came to light in 1506. During this transport the right arm of the smaller boy and the right arm of Laocoon himself were lost. Surprisingly, the latter reappeared in 1905 in the workshop of a stonecutter who said he had found it in the Via Labicana (p. 24). Though other scholars (e.g., Winckelmann, p. 23-23; Andreae, *loc. cit.* p. 98) believe that the finding place *Sette Sale* was (near) part of a palace where Titus once lived (on the Oppius), this is thought impossible by Hafner (p. 24).

All this shows, we are told, that our Laocoon is not the one mentioned by Pliny (p. 25) and therefore not the work of the three Rhodian sculptors of the Scylla in Sperlonga.

So far Hafner's reasoning cannot be disproved and may therefore perhaps be right, though, I expect, not many students of ancient sculpture will be definitively convinced: after all, it is not easy to believe that there were

two such elaborate pieces of sculpture as our Laocoon in Rome simultaneously; Pliny (who died 79 A.D.) clearly knew of only one.

Next, the author deals with the question why Pliny lavished such extraordinary praise on the Laocoon-group that stood in the house of Titus (and is now, he believes, lost). Pliny, Hafner points out on p. 26ss, had no eye whatsoever for sculpture, nor for any other kind of art, for that matter—a trait that he had in common, it seems to me, with many Roman intellectuals of the time: witness the atrocious remarks of Quintilian quoted on p. 28. (Perhaps, however, some scholars will not agree with this judgement of Pliny's lack of artistic taste, though it seems obviously true to me). Therefore, he must have had other reasons than artistic joy and Hafner tries to discover them. The names of the three (hardly known?) artists cannot account for his praise, nor could the statue boast of a lineage of famous previous owners (Pliny would certainly have told us). The technical feat of having been carved “*ex uno lapide*” (though probably untrue in this and many other cases, see above) was, of course, mentioned to inspire admiration, but cannot account for the excessive praise. Hafner believes that the problem is explained by Pliny's words “*de consilii sententia*”, which he takes to mean “according to the advice of the council of friends of Titus” to which Pliny himself may have belonged (p. 29); Pliny had personally been co-responsible for the choice of the sculptors and the subject: therefore, he is priding himself on his own advice. This explanation seems rather forced to me and perhaps another interpretation of Pliny's words may be possible. Eichholz (Loeb 1962) translates: “were carved ... in accordance with an agreed plan by those eminent craftsmen ...”. The position of the words before “*fecere summi artifices*” seems to mean that the three artists worked together according to a well-considered plan taken by themselves in common council (regarding the size of the block and the execution): the words seem to indicate that they worked together on a footing of equality, none of them being sole master of the work.

Hafner believes that the three Rhodian sculptors worked in Sperlonga at the time of Domitian (p. 31 and 33) and that at the time of Tiberius the grotto of Sperlonga, which during a meal nearly killed him with falling rocks, was a natural, unworked cave (p. 31-32); the triclinium, sculptures and other “furniture” were carved only under Domitian, as is suggested by the Faustinus inscription (p. 32, fig. 10). The occasion for the acquisition of the (lost) Laocoon group by Titus (as a symbol for the fall of Troy) Hafner finds in the destruction of Jerusalem by Titus in 70 A.D. (p. 29). This Laocoon must, therefore, have been somewhat earlier than the Sperlonga sculptures. It was, Hafner assumes, executed in the colossal style of the time (compare fig. 6 and 8), in size and exuberance very like the Sperlonga statues (p. 33); it is this colossal version that inspired the contorniates of figs. 15 and 23 and the picture in a Virgil manuscript (fig. 16 and 22), which differ fundamentally from the Vatican Laocoon: what it may have looked like is shown in the sketch of fig. 24.

In the final chapter we return to the Laocoon of the Vatican, which is usually regarded as a copy of a bronze



Hellenistic original (but see the list of literature p. 51-55), a very good copy indeed, for there are no obvious struts. Hafner, however, believes it to be an anonymous original of the time of Augustus. It was known to the three Rhodian sculptors who transformed and enlarged it into something like fig. 24. The sculptor did not follow Virgil's description but the use of Carrara marble indicates that he must have been a contemporary (p. 41). The statue symbolized the connection between Troy and Rome, as did the group of Aeneas, Anchises and Ascanius on the Forum Augusti, which may have shown a certain similarity in composition (p. 42, fig. 28 and 30). The style also, the author says, fits in with the *aurea aetas* of Augustus: the baroque elements of late Greek art are here harmoniously domesticated and collected into a solid composition in the noble style of the Augustan period. Hafner continues in this vein by comparing the *gemma Augustea* (fig. 31 ss) in which he recognizes "*erstaunliche Entsprechungen*" (p. 44)! This stylistic analysis seems very doubtful to me: the Laocoon differs clearly from the usually well-behaved classicist Augustan style in almost every detail, especially in its powerful emotionality.

At the end of the booklet there is a list of studies (with a short indication of the main conclusions of each) running from 77 A.D. to 1991 (p. 47-55). The present study should be added to it but it does not, unfortunately, fulfil its promise, which was: definitively to "cut the Gordian knot" of this technically admirable and emotionally convincing piece of European sculpture.

J.M. Hemelrijk

MARIO DENTI, *Ellenismo e romanizzazione nella X. regio: la scultura delle élites locali dall'età repubblicana ai Giulio-Claudi*. Roma: Giorgio Bretschneider, 1991. 377 pp., 1 text fig., 102 pls.; 30 cm. (Archaeologica; 97). – ISBN 88-7689-065-3. – LIT 880.000.

L'autore presenta in questo poderoso volume i risultati del suo dottorato di ricerca (1986-1989) che riguarda la decima regione augustea, quella di *Venetia et Histria*, tuttora occupante quasi l'intero Friuli e Veneto più parti dell'Istria slovena e della Lombardia: le estremità sono Pula all'est e Cremona all'ovest. Denti cerca di stabilire il grado di ellenizzazione di questa zona – per forza non un ambiente definito culturalmente ma soltanto un areale amministrativo, che ha svolto un ruolo di perno fra l'Oriente e l'Italia meridionale – e il successivo trascorso verso il mondo romano. Sappiamo che gli abitanti in generale si sono schierati volontariamente a fianco dei Romani senza abbandonare i contatti con il mercato orientale, concentrando su Delo e la costiera microasiatica. Ciò risulta in una ricchezza economica nell'epoca repubblicana e primoimperiale che finirà soltanto nel tardo I secolo d.C. Per tal motivo l'arco di tempo scelto, indicato nel titolo del libro, è interamente giustificato.

I termini 'ellenizzazione' e 'romanizzazione' sono di uso frequente ma purtroppo l'autore non dà una definizione chiara di essi, mentre sappiamo abbastanza bene che vi sono varie complicazioni nell'uso di una terminologia alquanto 'sfruttata' ma sempre difficile (cfr. p.es. T.

Derks, *MEFRA* 104 (1992), 7-8 con le note relative). Secondo Denti valgono prima di tutto i transiti dall'una all'altra cultura di una certa epoca, cioè in primo luogo dalla cultura indigena a quella *koinè* internazionale del II secolo a.C. e in secondo luogo dall'indipendenza alla sottomissione dei Romani. Sono in realtà meno palesi queste definizioni, perché l'atteggiamento della popolazione non cambiata o ribellatasi è di ricevere ed accettare più che sentirsi costretti a passare sotto il giogo di un nuovo potere. I vari componenti di un processo del genere e i fattori coinvolti non sono stati presi in considerazione. Perciò il processo è più graduale e viene caratterizzato da adattamenti di modi 'moderni', più attuali, non da adattamenti forzati. Per l'autore lo studio di una sola categoria di ritrovamenti, sculture, può servire come base per la discussione sui cambiamenti sociali e culturali in una regione, mentre vi è un ventaglio di fattori da prendere in esame, cominciando con le condizioni della terra (cfr. ora G. Rosada, *Il paesaggio tra fonti e archeologia: il caso della "Decima Regio"*, in: M. Bernardi (ed.), *Archeologia del paesaggio*, Firenze 1992, 667-708).

I fenomeni quindi sono stati studiati mediante un'analisi approfondita di monumenti statuari trovati (o supposti di essere trovati) in diciotto città fra le quali Pula, Trieste, Aquileia, Verona, Brescia e Vicenza (cfr. la brutta pianta a p. 21). Denti non ha preso in esame rilievi ed elementi plastici architettonici e per quanto riguarda i materiali si limita a pietra/marmo e bronzo. I criteri per l'inserimento di un oggetto non sono completamente chiari, dato che mancano parecchi monumenti delle categorie discusse: frequentemente i pezzi menzionati nelle note e nel testo come confronto o per altri motivi non sono stati discussi allo stesso modo (p.es. quelli illustrati sulle tav. XCII-CII; Altino p. 174; Padova p. 186; Vicenza p. 224). Ne risulta una mole di ben 114 oggetti descritti e fotografati.

I diciotto capitoli sulle città in discussione (pp. 23-312) si dividono in una descrizione sotto forma di schede dei pezzi ivi noti e un'analisi della cultura di queste città sotto l'aspetto della 'cultura statuaria'. Questa seconda parte in generale dà un rapido riassunto delle conoscenze storiche ed archeologiche sulle *coloniae* e approfondisce, per quanto possibile, la questione qui sopra riportata.

Gli oggetti appartengono a due categorie principali: la prima, piccola, incorpora plastica ideale e di soggetto mitologico, la seconda, molto grande, concerne i ritratti e le statue iconiche (togati, corazzati). Ogni scheda comprende bibliografia, descrizione dettagliata e esame delle discussioni finora fatte nonché le osservazioni dell'autore. La maggior parte degli oggetti è già stata pubblicata in cataloghi museali, ma vi sono alcuni inediti di certo interesse. Spicca il fatto che in molti casi non si conosce l'esatto luogo di ritrovamento per cui l'oggetto perde un possibile valore per l'analisi contestualistica (p.es. Aquileia no. 6-8). Il capitolo su Trento (p. 271-278) comprende un solo pezzo, del quale non si sa nulla di certo, per cui l'intera discussione diventa assurda. La qualità delle schede tali e quali è buona e trapela una grande pratica con lavori del genere. Denti è familiare con la vasta bibliografia sulla scultura ellenistica e romana e con quella topografica e storica della zona. Ma

vista la presenza di buoni cataloghi mi chiedo se non avesse potuto limitarsi ad elenchi con rimandi e con illustrazioni, più osservazioni personali e supplementari, per questi pezzi. Si veda la serie eccellente dei 'Musei del Veneto' curata da G. Traversari (cfr. p.e. *BABesch* 65 (1990), 167-168; 66 (1991), 188-189) e il catalogo sempre importante della Scrinari per Aquileia. Tutto il peso dell'attuale lavoro soltanto contribuisce all'allargamento del volume, il che fa perdere dall'occhio l'obiettivo originale dello studio. I brevi resoconti sulle città sono interamente giustificabili perché scritti da un punto di vista originale e ne emergono spinte per ulteriori discussioni. La bibliografia esistente viene incorporata ottimamente.

I capitoli per forza sono di peso squilibrato. Solo Aquileia e Verona hanno un numero di oggetti notevole (risp. 28 e 25) mentre tre città seguono con 8-10 pezzi: Trieste, Tarvisio e Vicenza. Il resto non viene oltre il povero numero di cinque. Così spicca la povertà di Brescia con due oggetti, dei quali uno è la famosa Vittoria/Venere, mentre conosciamo lì tante testimonianze architettoniche dell'epoca in discussione. Va da sé che queste quantità appena permettono conclusioni di grande valore riguardo alla domanda posta all'inizio del volume. Ciononostante l'autore propone, in queste paragrafi di ogni capitolo, pensieri del tutto ipotetici.

Il lettore può soltanto stabilire che la limitazione alla scultura di tutto tonda è estremamente arbitraria. Rilievi e decorazioni architettoniche frequentemente consentono più sicuramente una conclusione sulla presenza di monumenti importanti in una città e sulla loro datazione. Serie di statue trovate in un teatro o anfiteatro (p.es. Verona e Vicenza) di per sé non dicono nulla sulla fondazione del monumento, come spesso sembra suggerire l'autore, ma sono soltanto un *terminus ante quem*, anche se importante. Il contesto di *mobilia* inoltre rimane un punto di discussione a parte pochi casi ben documentati. La fortuna della tradizione di monumenti svolge un grande ruolo nel problema della quantità, ma ci forza anche a pensare a questioni rilevanti per la ricerca in esame. Possiamo, per esempio, sulla base di tanto pochi dati arrivare a conclusioni fondate? Nei paragrafi in ogni capitolo Denti non esita di prendere posizione. Nel capitolo finale (p. 313-345) invece rimane abbastanza nel vago.

Visto che questo ultimo capitolo in effetti è l'unico testo direttamente corrispondente al titolo della monografia, vale una breve discussione. L'autore si oppone ad importanti studi di G.A. Mansuelli ed altri secondo i quali non si conosce molto per il periodo repubblicano (o, nella terminologia di Denti, ellenistico), mentre l'arte dell'epoca imperiale rispetta il potere centrale. Anzi, accusa tali studiosi di una 'demarginazione' tramite un 'forzato spostamento cronologico' verso l'epoca imperiale (p. 320). I dati raccolti nei primi 18 capitoli devono bastare, secondo Denti, per travolgere l'ipotesi di Mansuelli: tutto ha uno stretto legame con la *koinè* dell'Oriente e di là arrivano spinte per lo sviluppo culturale della *Venetia et Histria*. Nel I secolo a.C. vediamo l'ascesa dell'*élite* locale in servizio del potere romano che man mano fa cambiare il contesto tradizionale a favore di una romanizzazione. Denti a ragione menziona

la letteratura fiorente (p.es. Catullo e Livio). I potenti di Roma cercano appoggio presso personaggi di spicco della zona e ci fanno visite. L'economia fiorente susciterebbe la domanda di oggetti artistici di una certa qualità. Anche se la prosopografia informa sulla presenza di '*élites*' non è detto che loro domandassero esplicitamente oggetti del genere. Vi sono inoltre pochissimi casi dove possiamo parlare di opere d'arte. La statuaria rappresentativa certamente è di committenza, ma non informa su un gusto specificamente artistico, in quanto banale e corrispondente all'immagine generale dell'Italia repubblicana e primoimperiale. Secondo Denti i casi studiati delle singole città mettono fuori alcune conclusioni generali: 1) i committenti fanno venire artisti greci; 2) il livello presumibilmente alto fa alzare il prezzo, 3) i soggetti riguardano l'interesse dei committenti. Il primo punto non viene corroborato se non in due casi di firma (*Praxiteles* p. 232, 263, 336; *Kleomenes* p. 233, 336). A proposito del livello Denti non è oggettivo in quanto si presenta dal lato opposto dell'accusa verso Mansuelli: egli spesso fa forzati spostamenti cronologici (per citarlo di nuovo) verso il I secolo a.C. I soggetti non sono concentrati in particolar modo su personaggi a noi noti e non illustrano un atteggiamento unico di questa zona della penisola italiana. Purtroppo, secondo me, dobbiamo concludere che Denti si è perso in *une idée fixe*. La discussione di dettagli fornisce innumerevoli prove per le mie riserve; ne presento soltanto alcune.

Aquileia. Il ritratto no. 4 mi sembra più un pezzo augusteo che uno ellenistico. L'interpretazione della copia del 'Pasquino' (Aquileia no. 17) come espressione del contrasto fra Oriente ed Occidente viene argomentata con i ritratti augustei, ma questi non sono stati trovati nello stesso contesto! Inoltre, non aggiunge molto alla conoscenza della *Zeitgeist*. Il fatto che i numeri 18 e 19 provengono dallo stesso luogo non vuol dire che siano dallo stesso scultore; è un argomento gratuito. L'accoppiamento di no. 18ss. come una famiglia imperiale non viene provato da nulla, ma serve come argomento per Denti di ricostruire una serie di statue imperiali. Nell'evaluazione (p. 104-119) Denti sostiene che la presenza di quattro pezzi ellenistici di alto livello (nos. 1-4) evidenzia un'alta cultura ellenistica presso l'*élite* locale; tuttavia non sappiamo la loro provenienza e dobbiamo domandarci se siano davvero sempre stati ad Aquileia, per non parlare di essere stati prodotti lì. Poi si presenta la questione del carattere privato o di culto e quindi del gusto ellenistico del committente tutt'altro che noto. L'epoca augustea viene definita dall'autore come un 'periodo culturalmente non ancora univocamente determinato' (p. 107): questo vale altrettanto per i periodi successivi e non dice nulla sulla cultura dell'epoca. Di nuovo l'eterogeneità dei pezzi invita a tali osservazioni. Va troppo lontano inserendo l'intero bacino mediterraneo orientale dopo le guerre mitridatiche per arrivare a spiegazioni per le statue ideali della seconda metà del I secolo a.C.

*Iulium Carnicum* (Zuglia) La discussione sulla data del no. 1, un busto maschile bronzeo, si sviluppa nella nota 4 (p. 123), dove si accusano certi scrittori di una parzialità dal punto di vista del gusto; nello stesso testo la conclusione di Denti non si basa su altri argomenti. Come

gli autori vituperati riterrei la testa 'romana', forse della prima metà del I secolo d.C.

**Tarvisium** (Treviso) Considerato che il materiale del pezzo no. 3 assomiglia a quello di Altino l'autore conclude che la fabbricazione deve essere altinese (p. 155, cfr. le pp. 171-179 su questa città): non è un ragionamento puramente logico. La conclusione serve da base per 'stabilire' che la zona trevigiana è stata ellenistica (p. 157).

**Altinum** (Altino) Esempio di una scelta arbitraria di pochi, ma interessantissimi pezzi (Tifone e Giganti; buoni ritratti). Sembra che vi sia altro materiale inedito, apparentemente non pubblicabile da parte dell'autore (p. 174). Tutto questo invita all'ipotesi di un collezionismo ellenistico messo in rapporto con Asinio Pollione, conclusione senza base fondata.

**Verona** La presenza di statue nell'anfiteatro al mio parere non può essere un'indicazione per la datazione del monumento. La collocazione non era sicura e poi potrebbe servire al massimo come *terminus ante quem* non. La conclusione che vi sono molte (= 25) statue non spiega e non va parallela alla ricchezza di fonti scritte (così p. 259): di nuovo una conclusione troppo frettolosa.

**Brixia** (Brescia) Convincente la datazione alla seconda metà del I secolo a.C. della Venere bronzea, pezzo più famoso e più discusso di tutta l'arte statuaria qui in esame (p. 282-283). I ragionamenti riguardanti un legame fra la Venere Vittrice del Foro di Cesare a Roma e questa statua come oggetto di culto nel *Capitolium* sono tuttavia troppo ottimistici, perché mancano dati a parte le osservazioni stilistiche. Trapela il voler concludere in questo modo (pp. 284-286) per unico mezzo di un'analisi stilistica.

Le illustrazioni sono numerose, in genere soddisfacenti ma non di qualità eccellente. Purtroppo le riprese non sono consequenti, talvolta quattro lati, spesso uno o due. In conclusione devo constatare che le analisi delle statue sono ottime ma usate per uno studio che in questo modo non può essere fatto. La mancanza di un fondamento teorico sulla 'lettura' di una cultura in senso storico-archeologico è chiaro in ogni pagina del volume.

Eric M. Moormann

GIORGIO BEJOR, *Le statue*. Roma: Giorgio Bretschneider, 1991. 103 pp., 44 pls.; 30 cm (Hierapolis, Scavi e ricerche; 3) (Archaeologica; 99). – ISBN 88-7689-063-7. – LIT 280.000.

Dopo un intervallo di sei anni viene presentato il terzo volume delle ricerche italiane a Hierapolis (Pamukkale, Turchia), che contiene, purtroppo, non un resoconto degli scavi o un ampliamento degli studi sul teatro, ma un catalogo di sculture trovate durante i lavori della Missione Italiana dal 1957 al 1987. Questo sorprende perché chi ha potuto visitare la zona nell'arco di tempo qui indicato (o anche di meno, come il sottoscritto dal 1978 in poi), ha constatato il progresso enorme fatto negli scavi e si sente allo stesso momento desolato per la mancanza di buone descrizioni dei ruderi.

Bejor, nello stretto scopo del volume, cerca di ambi-

entare questi ritrovamenti che in generale sono stati documentati perfettamente da coloro che li hanno trovati. Tutto il materiale in esame è scultura a tutto tondo (apparentemente: un rilievo con il ratto di Persefone è soltanto menzionato a p. 6), quarantasette pezzi ora magazzinati e per la maggior parte esposti nel museo locale (cioè le antiche terme). Solo due oggetti sono rimasti *in situ* (cat. 13-14 nel teatro). Il volume si articola in quattro parti di catalogo divise secondo il luogo di ritrovamento: teatro (cat. 1-22, pp. 1-46), tempio di Apollo (cat. 23-32, pp. 47-61), città (cat. 34-42, pp. 63-78) e pezzi dispersi (cat. 43-47, pp. 79-86), mentre alla fine l'autore pone la questione se, in base al materiale qui documentato più quello pubblicato prima, possa essere ricostruita una 'scuola ierapolitense'.

Le sculture del teatro tuttora sono completamente schedate, quando ricordiamo le ottime monografie di Tullia Ritti e Francesco D'Andria (cfr. H.W. Pleket, *BABesch* 62 (1987), 182-183; E.M. Moormann, *BABesch* 62 (1987), 180-181). Fino al VI secolo d.C. la *scaenae frons* sembra che fosse integra: costruita alla fine del I secolo subì una ristrutturazione quasi completa negli anni 205-207, poi restauri nell'epoca postcostantiniana, tutto documentato nella grande epigrafe della corniciatura della stessa fronte del teatro. L'autore riesce in parte a ricostruire il collocamento delle statue trovate nel crollo, per cui si avrebbe visto volentieri una ricostruzione grafica di tutti gli elementi (cfr. p.e. M.C. Sturgeon, *Corinth* IX.II, Princeton 1977, plate 91). La pianta (tav. I) purtroppo è di poco valore. Incontriamo un gruppo di sculture corrispondenti ai temi consueti per l'allestimento dell'architettura teatrale: figure mitologiche nel secondo o terzo piano (Hades/Sarapis, Apollo, Leto e Artemide), ritratti dell'imperatore (*clipeata imago* di Settimio Severo, cfr. vol. I). Lo Hades è particolare in quanto appartenente al culto nel Plutonio, complesso vicino al teatro. L'allestimento del teatro di Hierapolis, in conclusione, dimostra una serie di convergenze con altri edifici del genere in Asia Minore, come convincentemente viene provato da Bejor nel paragrafo conclusivo (pp. 38-46), che è molto informativo.

Il secondo gruppo di nove statue è stato trovato nel recinto del tempio di Apollo, tuttora quasi completamente scavato e sfortunatamente non presentato con foto e pianta aggiornata. La foto e la piantina del complesso importante (tav. 26) avrebbero potuto mancare nelle attuali condizioni; dagli stessi scavatori potremmo chiedere una documentazione migliore. Purtroppo gli oggetti in questione non possono essere 'ricollocati' nel loro contesto originario, in quanto trovati dispersi e come materiale di riuso. Alcuni appartenevano ad un ninfeo, altri sono stati offerte. Come nel teatro l'arco di tempo va da Domiziano fino al tardo IV secolo.

I pezzi dispersi dell'area urbana per forza non costituiscono un'entità omogenea. Tutte le otto sculture descritte sono trovate fuori contesto. La Tyche (cat. 33) forse appartiene al gruppo di statue mitologiche dell'ultimo piano del teatro (vedi sopra) come il cat. 34 (Dioniso, ma vedi qui sotto) pur molto piccolo. Interessante il Marsia (cat. 35) che simboleggia una storia svoltasi nella regione adiacente.

Infine Bejor presenta alcuni pezzi forse provenienti



dall'immensa necropoli, ora meta quasi 'romantica' dell'area archeologica con tutti i sarcofagi semiaperti e rovesciati come un paesaggio del Giudizio Finale. Queste appartenenze mi sembrano plausibili.

Il valore del volume va oltre quello di schedario grazie al capitolo 'Una produzione ieropolitana e una scuola di Docimio' (pp. 87-96), nel quale Bejor cerca di definire una possibile bottega oppure un 'Lokalstil' come conosciamo per Afrodisia e Docimio. In effetti, osserva giustamente, vediamo congruenze stilistiche in molte sculture del teatro. La presenza di oggetti non finiti come il cat. 36 (ritratto maschile) è un'indicazione importante. Per definire una vera 'scuola' mancano troppi dati, perché il materiale è abbastanza scarso e lacunoso. Un legame con Docimio pare accertato dalla provenienza dei marmi e da affinità stilistiche e cronologiche. Il II e III secolo sono un periodo di fioritura economica e culturale per l'intera Asia Minore ed anche Hierapolis ha goduto una notevole ricchezza.

Le schede di per sé sono esemplari per chi studia la scultura antica come tale. Sono informative sia sul campo dell'oggetto stesso che grazie all'inserimento nell'arte plastica antica in generale. Sempre l'autore cerca di stabilire un rapporto con la base 'classica' del V-IV secolo a.C. e rintracciare le possibili strade del prototipo e fornisce molti dati bibliografici e pensieri nuovi. Risulta che gli scultori adattarono vecchi schemi senza copiarli in maniera esatta di modo che non troviamo copie vere e proprie, ma solo 'Umbildungen'. Seguono alcune osservazioni di dettagli.

*Cat. 3* (Apollo Kareios). Manca una proposta di datazione e la collocazione nella *scaenae frons*: il fatto che è stato trovato presso l'iposcenio mi condurrebbe ad un inserimento al lato sinistro come le figure precedenti e quelle successive. Un gruppo di Apollo, Artemide e Leto (cat. 3-5) sarebbe idoneo in un contesto del genere. La data, in tal caso, è l'epoca severiana. La figura è affine all'Artemide (cat. 4).

*Cat. 9* (donna panneggiata). Manca la datazione. Anche in questo caso lo stile dei drappi ricorre all'epoca di Settimio Severo. La datazione manca altrettanto per il cat. 11-12 (Tritoni), forse severiani e per cat. 38-39, 46. *Cat. 10* (sfinge). Sono in pieno accordo con Bejor che il pezzo appartiene alla prima fase della *scaenae frons*. Lo stile è diverso, perché la plasticità dei muscoli spicca in modo naturalistico (cfr. tav. 11.2-3) e quindi non si avvicina alle sculture severiane come sostiene l'autore (p. 21). *Cat. 13-14* (figure femminili). Le statue colossali devono rappresentare divinità. Qui manca una proposta per la cronologia, ma visto che le statue non sono diverse stilisticamente dalle altre severiane, sono da datare a questo periodo.

*Cat. 17* (scrittore seduto). Quando è stato fatto il ritratto di questo uomo ignoto e dove era collocato? Tre domande purtroppo non risolte.

*Cat. 25* (donna con epigrafe *Affias*). Mi chiedo se il nome non si riferisca alla stessa offerente. L'analisi stilistica del cat. 26 vale altrettanto per questo pezzo sommariamente descritto.

*Cat. 34* (Dioniso). Il formato (36) del torso corrisponde, come lo stile e la plasticità della muscolatura, con il Marsia (cat. 35). A mio parere il 'Dioniso' potrebbe

essere un Apollo Citaredo a capelli lunghi che fa, con altre figure, un gruppo con il Marsia. Purtroppo la foto non permette un'osservazione sull'atteggiamento del dio. Per entrambe le figure Bejor non presenta una data. La plasticità classicistica sarebbe un'indicazione per l'età adrianea o primoantoniniana.

Le fotografie sono, nonostante il sostegno finanziario della ditta fotografica FOWA (p. V), di modesta oppure brutta qualità e neanche permettono una lettura completa delle schede. Quasi sempre mancano le prese dal dietro e dai lati, la focalizzazione e la presa di luce sono sempre diverse come anche le misure.

In fine devo purtroppo concludere, nel tenore del Pleket (vedi sopra), che anche la serie non si presenta coerente: tre volumi casuali per prezzi notevoli più un catalogo di mostra spesso citato, ma di tutt'altro ordine, e qualche articolo sono il frutto di trentacinque anni. Ci manca sempre una valutazione dell'insieme. Nelle modeste parole di Bejor sul carattere preliminare della sua monografia sembra trapelare questa opinione. Va da sé che Bejor non è colpevole; lui ha dato un contributo di ottimo valore allo studio della scultura microasiatica in generale. Sono soprattutto i lettori che rimangono abbandonati fra i *disiecta membra* di un sito talmente affascinante.

Eric M. Moormann

ROMOLO A. STACCIOLI, FRANCESCA R. FORTUNATI, PATRIZIO PENSABENE, FRANCA TAGLIETTI (eds.), *Miscellanea Etrusca e Italica in onore di Massimo Pallottino*. Roma: "L'Erma" di Bretschneider, 1991. 2 vols.; 1322 pp., ill.; 24 cm (Archeologica Classica, vol. XLIII). – ISSN 0391-8165.

Disciples and friends have dedicated the 43th edition of *Archeologia Classica* to their *maestro* Prof. dr. M. Pallottino, on the occasion of his 80th birthday. It contains 71 essays, varying in length from 3 to 67 pages, focusing on Etruscan and Preroman antiquities. Every article is followed by an up to date bibliography.

After a preface by G. Colonna and R.A. Staccioli a bibliography of the nestor of etruscology, mentioning in chronological order 670 scientific publications from 1928 to 1991, follows. It is a production 'senza paragone'.

Volume 1 consists of articles on 'pre- and protohistory', 'history, topography, architecture', and 'epigraphy and language'. Volume 2 has articles on 'archaeology and figurative arts' and on 'religion'. Of course, this division is arbitrary because there are many overlaps. It is impossible to summarize and discuss all contributions. I can just indicate in a superficial way the importance of the more substantial archaeological essays, presenting them in another order.

It is striking that many articles deal with the results of excavations or topographical research, usually presented in the light of cultural, commercial, artistic or other relations. Gilda Bartoloni deals in an exemplary manner with the exceptional Populonian coast settlements in the earliest phase of the Iron Age, stressing their intermediary role in the mineral exchanges between Bologna and Sardinia.

A. Cazzella throws light on the settlement of Coppa Nevigata (in Apulia) in the period between the Late Bronze Age and the Iron Age. As for the chronology of the 'evolved' Villanovan phase at Veii D. Ridgway now determines the beginning of the Close-Brooks phase I to about 780 instead of ca. 800 B.C.

F. Delpino elucidates on the documentary value of the first excavations in the archaic necropolis of Arcatelle at Tarquinia.

Another study on Tarquinia, dealing on Phoenician pilaster walls of a 'sacrificial building' (ca. 700 B.C.), is presented by Maria Bonghi Jovino. R.C. de Marinis explains the fine stratigraphy of the settlement of Forcello di Bagnolo S. Vito in the Po valley, which existed from ca. 530 until 380 B.C., and its chronological correlations with the Hallstatt, Golasecca, and Este cultures. The archaic phase of another peripheral site, Poggio Sommavilla, in the Sabine area (near Falerii Veteres) is presented by P. Santoro. As for the Faliscan area itself S. Quilici Gigli sketches the history of Corchiano from the 7th to the 3rd century B.C. Paolo Moscati shows the advantages of the use of database III software during the excavation of the urban area of Caere. G. Nardi presents a study on the typology of terracotta *louteria*, and F. Gilotta on an Etruscan red figure crater (ca. 350 B.C.) from the same site. P. Tamburi clarifies on the history of the settlements to the west of Orvieto, along the coast of the Lago di Bolsena, which functioned as *oppida* to Volsinii Veteres. G. Sassatelli demonstrates, using new epigraphical material, that Marzabotto was founded by people from the Po valley (recognizable at names on -alu) and not as formerly was assumed from North Etruria.

The rest of the articles deal mainly with artefacts. There is a very thorough study by G. Colonna on bilobate bronze shields from Norchia, Veii, and Lavinium (X-VIII B.C.) which he considers to be forerunners of the *ancilia* of the Salian priests. He illustrates the links between the Mycenaean antecedents, the protohistorical and the historic evidence concluding that the Salian dance has an Etruscan origin. A. Maggiani presents a new bronze 'swordman' from Volterra (VII B.C.). L. Bonfante dates a bronze male statuette dedicated to Selvans tularia ('Silvanus of the Border') to about 300 B.C. M. F. Briquet sees in some figured handles of Praenestine *cistae* not a reflection of sport activities but of theatrical performances. A.E. Feruglio presents an unpublished pair of bronze greaves from the Palazzone necropolis at Perugia dedicated to Menrva, a trophy may be originally made at Volsinii (after ca. 450 B.C.).

A most interesting article on a coroplastic acroterion representing Orestes killing Clytaemnestra from the Cannicella sanctuary at Orvieto (ca. 500 B.C.) is offered by Simonetta Stopponi. Maria José Strazzulla deals with Pergamian motifs, using as starting point an architectural terracotta with a gigantomachy now in Chicago. New marble monuments from North Etruria (with a petrographical analysis) are presented by M. Bonamici and others.

There are many small articles on ceramics: a bucchero aryballos with inscription; an Etrusco-Corinthian alabasteron from Macchiapiana; Attic black figured amphoras

showing the myth of Peleus and Thetis found at Bologna; two hardly classifiable black figured vases now in Trieste; a kylix by Euphronios with, under its foot, an exceptional inscription dedicated to Heracles; the origin, form and development of the Daunic *olla* with a funnel shaped mouth; an Etruscan fish plate; an Iberian vase from Ardea (II B.C.) together with a very useful survey of all similar ceramic finds in Italy.

Exciting is an article on a painted canopus found at Vulci (now at Museo Etrusco Gregoriano) by F. Buranelli. It is the first item found far out the territory of Chiusi, made of local impasto at Vulci in the 7th century B.C. Its presence may be due to an individual from Chiusi emigrated to Vulci. For another category of funerary art, S. Steingraber gives a useful and extensive catalogue of Etruscan monumental *cippi*.

A very rich article on the history of the sanctuary of Aphrodite at Paphos and its relation with the Uni Astarte temple at Pyrgi is offered by S. Stucchi. Ingrid Krauskopf illustrates the Phoenician backgrounds of the archaic representations of the Sun god in Etruscan art. F. Prayon shows that there is a relation between the orientation of Etrusco-Italic temples and the position of their gods in the sixteen regions of the Etruscan heaven, not agreeing with Pallottino's orientation of the *deorum sedes*. A.L. Prosdocimi clarifies on the significance of the sacrificial words *mola salsa*.

On iconography W. Dobrowolski analyses the representation of the Liberation of Prometheus on an Etruscan mirror (ca. 450 B.C.?) now at Cracow (unfortunately without drawing).

Who is interested in the Etruscan language should read H. Rix' essay on praying formulas in the Liber Linteus of Zagreb. The comparison of Etruscan formulas with Umbrian ones seems to be very promising. Other linguistic studies regard the word *lucumo*, the sensational inscription mentioning *Lauclie Mezentie* from Caere (?) (cf. Virgil's Mezentius), the *gens* Tute at Vulci, and the Sabine word *hehike* and Faliscan *fifiked*.

The historical essays deal with the first contacts between Phoenicians and Etruscans, the *ethnos* of the Faliscans, the concept of Ionian emigration, the *gens Tolumnia* at Veii, Marius and an Etruscan colony in Tunesia, the Etruscans in the Roman period etc.

The articles on V. Poggi and L. Lanzi on the history of etruscology are interesting.

Some articles have little or nothing to do with Etruscan or Italic themes, for example studies on the prehistory of Greek money, on the mysterious AREPO inscriptions, on a lithostraton for Silvanus, the toothed chisel, the earrings of the Lady of Elche etc.

It may be clear from this short summary that *Archeologia Classica* 43 has heterogeneous but fascinating contents with much unpublished material.

The publication is very well edited, with few printing errors (in the Contents however one should read Fausto Zevi in stead of Bruno Zevi, who writes on the enigmatic *atrium regium* on the Forum Romanum).

L.B. van der Meer

SHEILA CAMPBELL, *The mosaics of Aphrodisias in Caria*. Toronto: Pontifical Institute of Mediaeval Studies, 1991. 47 pp., 18 figs., 119 pls.; 28 cm (Subsidia Mediaevalia; 18). – ISBN 0-88844-367-6.

En 1988 a paru de la main de l'auteur, *The mosaics of Antioch*. Dans la préface, elle annonçait son intention de traiter, dans un tome suivant, des mosaïques du port et des faubourgs d'Antioche. En revanche, elle nous surprend maintenant avec un volume sur les mosaïques d'Aphrodisias. Ce catalogue est ordonné de la même manière maniable. C'est un privilège d'avoir à présent un aperçu de tout ce qui est connu jusqu'ici d'Aphrodisias. Mais c'est justement ce dont il s'agit. Ce privilège n'est que relatif. Dans tout le livre passe comme un fil rouge la constatation que la majeure partie des mosaïques n'a pas encore été déterrée (p. 8, 9, 16, 20, 22, 28, 29, 33).

A la fois feu Kenan T. Erim dans sa préface et l'auteur dans son introduction, commencent déjà par cette observation. Ainsi, ce tome paraît un peu maigre. On peut se demander quelle a été la raison de publier maintenant déjà ce qui peut-être devra être complété ou refait dans quelque vingt-cinq années. Les perspectives de nouvelles fouilles sont-elles si mauvaises?

Il faut en tout cas beaucoup de courage pour cette édition. Différentes nonchalance techniques sont inutiles et enlaidissent l'ensemble. Dans la bibliographie, la mention de l'oeuvre de Bruneau Philippe se trouve sur une ligne, juste derrière Bonner Campbell au lieu de figurer sur un nouvel alinéa. Derrière le livre de Duval Noël (il manque le tréma dans la texte) "Brusells" est écrit avec une faute d'imprimerie. Dans la table des abréviations il manque JRA-Journal of Roman Archeology. A la p. 8 on se réfère à une parcelle du temple d'Aphrodite, qui se trouve maintenant au musée d'Aphrodisias. Il est référé à Pl. 23. Cela doit être Pl. 24. A la p. 20 il est dit que la mosaïque de Sarachane est représentée sur Pl. 67. Il s'agit de Pl. 77. La référence à Pl. 76 n'est pas exacte non plus. A la p. 20 et 29 on dit qu'il s'agit du sol devant le bâtiment Vilayet à Istanbul. La légende auprès des planches mentionne "House 2".

Une seule imprécision peut se présenter. Trop d'imprécisions produisent un effet dérangeant.

Avec si peu de matériel disponible, la datation au moyen de comparaisons de motifs géométriques devient une entreprise hasardeuse. Je ne peux certainement pas suivre l'auteur lorsqu'elle compare le sol dans la chambre nord du complexe Temenos avec la mosaïque dans le tombeau de Mnemosyne à Antioche, en se basant sur l'arrangement (p. 4). Dans le complexe Temenos, le cable est gros, rond, gonflé. Dans le tombeau de Mnemosyne, il est effilé et anguleux. La comparaison du complexe Temenos avec les mosaïques de la synagogue à Sardis est plus réussie, sans être convaincante. Mais je ne peux pas suivre non plus, à la p. 9 et 34, la comparaison de la mosaïque levée du temple d'Aphrodite (Pl. 24 et non 23), actuellement au musée d'Aphrodisias, avec les mosaïques dans la synagogue à Sardis. A Aphrodisias, les pointes des boucliers se terminent par un élégant jeu de lignes. A Sardis, l'accent est mis sur des surfaces.

L'auteur compare la mosaïque de Galene (Pl. 30-31) dans l'Area Est de l'Odeon, Area 1, avec le panneau de

Phèdre dans le "House of the Red Pavement" à Antioche. Ici également, il faut que je présente des objections. Le personnage à Aphrodisias est représenté de façon dynamique, pittoresque, avec des restes de feuillage en toile de fond. Sur la mosaïque à Antioche les personnages sont présentés de manière statique, sur un fond uni. L'encadrement aussi est totalement différent dans les deux pièces.

Nous nous en tiendrons à ces quelques exemples. Des datations qui se basent sur ce genre de comparaisons, perdent leur force de conviction. Nous devons attendre jusqu'à ce que, après de nouvelles fouilles, nous connaissions davantage de l'histoire d'Aphrodisias. Toutefois, il ne serait pas juste de n'éclairer que les côtés négatifs de ce livre. A part les imprécisions techniques, l'auteur a fait le grand effort de rassembler et de commenter pour nous un petit groupe de mosaïques difficilement accessibles. Le fait que cette entreprise ne réussisse pas directement de façon infaillible est clair pour tout le monde, étant donné que beaucoup n'a pas encore été déterré.

Le livre de Madame Sheila Campbell reste une acquisition, de laquelle nous lui sommes reconnaissants.

Eliz. P. de Loos-Dietz  
(Traduction Madame M. Peck-Balliere)

BALDASSARE CONTICELLO, LUISA FRANCHI DELL'ORTO, ANTONIO VARONE (eds.), *Rediscovering Pompeii: exhibition by IBM-Italia*. New York City, IBM Gallery of Science and Art, 12 July – 15 September 1990. Roma: "L'Erma" di Bretschneider, 1990. 287 pp.: num. ills. (many col.) 32 cm. – ISBN 80-7062-686-5.- LIT. 150.000.

The excavations in the towns that were buried in 79 A.D. by the eruption of Mt. Vesuvius appeal to the imaginations of many. It is not surprising, therefore, that exhibitions of finds from these cities are organized on a regular basis in Italy. In the last few years, IBM's Italian subsidiary sponsored exhibitions of numerous finds from Pompeii and its surroundings outside of Italy. After opening in New York, the exhibition was held in such cities as Malmö, London and Amsterdam (December 1992-March 1993). This review discusses the bilingual version (Italian-English) of the extensive catalogue issued by the exhibition. Most of the chapters preceding the description of the objects exhibited introduce the reader to the *Progetto Pompei*, an extensive programme which began in the eighties and consisted, among other things, of measures to restore, preserve and document the excavations in the cities around Mt. Vesuvius. One of the major tools used in the programme to conduct the various aspects of archaeological research in the cities around Mt. Vesuvius is the computer. The emphasis on these computer programs in the chapters preceding the catalogue did not leave much room to place the objects described in the catalogue in a broader framework.

In the first chapter (*Rediscovering Pompeii* pp. 1-23), B. Conticello, the present Superintendent of the Archaeological Service of Pompeii, gives a clear outline of the history of the excavations and the importance of



the excavations in Herculaneum and Pompeii to Neo-Classicism. He also discusses the *Progetto Pompei*, giving examples, and stresses the importance of an interdisciplinary and systematic approach to the problems of the ancient cities. To illustrate this point, he mentions the use of computer simulation programs as a means of reconstructing roofs.

A number of contributing authors deal with the use of computers in different branches of archaeological research in Pompeii and its surroundings (A. Stazio: *Numismatics and computers*; M. Gigante / M. Capasso, *Papyrology and computers*; A. de Simone, *Archaeology and Science*; St. Bruschini, *Von Neumann and Pliny*, a very mysterious title). Gigante and Capasso have the most sober approach (pp. 60-61): "But we should never forget that the computer remains a tool to help the scholar in making choices, for in no case can it replace his or her intelligence". Various authors discuss other aspects of the use of computers under the section entitled: *Computer Programs* (pp. 116-127). On the one hand, the reader is presented with the recently developed mathematical-numerical models which simulate the dynamics of a volcanic eruption, a subject so technical that one wonders whether it is not far beyond the general public, and with computer programs on the other, which he can consult during the visit to the exhibition. The latter bear titles such as "Artifacts in Action", "Images on Walls" and "Walking on Video". The last program gives the visitor the opportunity to choose his own tour through two Pompeian houses, the Casa del Menandro and the Casa dei Vetti. According to the authors, visitors of the exhibition can receive information on decoration, finds and function of the rooms, among other things. It is a pity that the catalogue does not include any examples to illustrate this program. According to the writers the connection these programs make between the finds presented in the exhibition and their role in Pompeian everyday life can neither be found in this chapter, nor in any of the others. This information is available only through the computer programs at the exhibition.

Some contributing authors deal with other subjects entirely. A. Varone, in his article (*Voices of the Ancients: A Stroll through Public and Private Pompeii* pp. 26-41) takes the reader along on an imaginary tour through the ruins of Pompeii in search of inscriptions which give insight into the public and private life in the town. This chapter contrasts with most of the articles that follow it because of its light style and its general nature. Unfortunately, a detailed plan of the town and illustrations to make the story even more tangible, are lacking. The illustrations shown in this chapter are disconnected from the text and the map on pp. 8-9 is not detailed enough to envisage a mental path of such a walking tour. F. Bologna discusses the influence of the discovery of Herculaneum and Pompeii on the artistic culture of eighteenth-century Europe (pp. 78-92). M.L. Anderson gives an outline of the origins of the largest collections of Pompeian antiquities in the United States: the Metropolitan Museum in New York, the Museum of Fine Arts in Boston and the John Paul Getty Museum in Malibu (pp. 92-103). An interesting point he makes, is that these American museums were unable to acquire

many objects from Pompeii itself, but that most of their acquisitions came from villae around Mt. Vesuvius. Furthermore this is the first article to include illustrations which match up with the text. The preceding articles are illustrated with water-colours related to Pompeii from the Deutsches Archäologisches Institut in Rome and early photographs from the Museo di Storia della Fotografia Fratelli Alinari at Florence which are not directly related to the text.

Most of the book (pp. 128-287) has been filled with descriptions of the objects on exhibition (194 numbers). The structure of this catalogue seems to be thematic, with its introductions of well-defined subjects followed by the objects under that heading. To a certain degree, the objects presented are related to these introductions, but, in some cases, they could have been categorized more accurately. At times the relationship to the introduction is entirely unclear. This is the case with the very first catalogue item, a reconstructed olive mill, placed after an introduction on the eruption of A.D. 79. The cast in epoxy resin of a young woman from Oplontis (cat.nr. 2), on the other hand, was well placed. The same can be said of the theme *Inscriptions*, under which catalogue numbers 13-15 are well placed, 16 to 24 (raw materials for paint) only to a certain degree, and 25-55 are entirely mismatched. The latter group would have had much more relevance to introductions on toiletry, medical implements, writing materials and tools. A silver mirror and several kinds of jewellery have been placed under the heading *Food and drink*. One would also expect the garden paintings in cat.nr. 163 to follow the introduction on *Gardens* (pp. 258-259). In view of the objects presented from places other than Pompeii itself, it would have been better to include a map of the entire area with detailed markings, so as to give the reader an idea of such places as Terzigno and Villa B at Oplontis.

The strongest asset of the catalogue is that it describes a large number of hitherto unpublished objects. In fact, many of these objects have only been excavated in the last few decades. Although not that many 'famous' finds are presented in the catalogue, all the objects described are worth seeing. The reason for this lack of famous objects is possibly that the exhibition does not include any material from the Museo Nazionale at Naples. The objects seem to have been deliberately chosen from those which normally lie stored in the depots of the excavations themselves. The extensive descriptions of this material and the very well presented photographic documentation are of great interest to experts and interested laymen alike.

S.T.A.M. Mols

LUCIA PIRZIO BIROLI STEFANELLI (ed.), *Il bronzo dei Romani: arredo e suppellettile*. Testi di Maddalena Cima Di Puolo [et al.], Roma: "L'Erma" di Bretschneider, 1990. XII, 298 pp.: 273 ills. (many col.); 28 cm (Il metallo: mito e fortuna nel mondo antico). – ISBN 88-7062-675-X. – LIT. 150.000.

It was not every Roman who could afford the luxury of bronze utensils. The material was expensive and there

were often cheaper, though less durable, alternatives. Although the book edited by Lucia Pirzio Biroli Stefanelli presents an overall satisfactory outline of the diversity of bronze household utensils of the time, it tends to overlook the alternatives in other materials. At times, the book can give us the impression that the material presented was used generally in large strata of Roman society. The material under discussion furthermore almost without exception is of high quality, although there are marked differences in the quality of Roman bronze objects.

It goes almost without saying that the book concentrates to a great extent on finds from the cities surrounding Mt. Vesuvius, where many bronze objects were found which had a function in public as well as private life. As early as in the eighteenth century, visitors of the Museo Reale at Portici gazed at the great variety of objects, their striking resemblance to contemporary pieces and the technical skill that characterized many bronze finds. To illustrate this early interest, the authors have chosen to reproduce engravings in this book from older publications (*Real Museo Borbonico*, I-XV, Napoli 1824-1857; C. Ceci, *Piccoli bronzi del Real Museo Nazionale*, Napoli 1858<sup>2</sup>; *Raccolta de' monumenti più interessanti del Real Museo Borbonico e di varie Collezioni private*, pubblicati da Raffaele Gargiulo Impiegato nel detto Real Museo, Napoli 1825). Although these reproductions are often inserted where the objects drawn on them are under discussion, the relationship to the text is not always that clear. There are, for example, no references in the text to the engravings shown in fig. 4, 15, 19, 22, 27-32, 37-38, 40-42, 46, 53, 62-65, 71 and 150. In addition to the engravings, the different essays are illustrated with numerous beautiful colour photographs, which show the fine outlook of the objects and provide us insight into the technical skills of the Roman craftsmen. The book also shows representations of bronze objects on other forms of Roman art which illustrate their functions and the techniques used to make them. Some of these representations, however, are also left unmentioned in the text (fig. 2-3, 6, 8, 18, 25-26, 150 and 196). The structure of the book is organic. After explaining the technique of bronze processing, the book goes on to discuss the spread of bronze utensils in the Republic and Empire periods, after which it continues with a thematic discussion of the different types of household utensils. According to the authors, only the most remarkable samples from the different categories of objects have been chosen. Bronze statuettes are excluded from discussion as they are to form the subject in an entirely different book. Most of the objects discussed are from Italy, although one would expect that a survey whose title implies such a comprehensive overview, would also cover the provincial Roman bronzes.

In her introduction, Lucia Pirzio Biroli Stefanelli first throws light upon the importance of finds from the area around Mt. Vesuvius, namely that they document the public, religious and private life in a unique way. Likewise, she points out the significant influence this material had on the decorative arts of the eighteenth and the early nineteenth centuries, when the bronze objects themselves and the representations of them in wall-

paintings served as a source of inspiration. She indicates that starting at the end of the Republic, the use of bronze assumed enormous proportions, especially after Spain, rich in raw materials, became a definite part of the Empire.

In the first chapter, *Il bronzo* (pp. 5-32), the editor begins explaining the technique of the bronze processing. One of her conclusions is, that the artisans were highly skilled, as can be seen in a study of the finished products and through analyses of the alloys used. They were very well aware of the properties of metals and fully exploited them during processing. She also goes on to discuss the centres of mining for different raw materials (pp. 27-31) and the techniques used in making and decorating bronze objects (pp. 33-38). On page 35 she explains about hollow (*cire-perdue*) casting and the finishing touches on objects "con abrasivo", a term which is so open to interpretation that it arouses the reader's curiosity about what this abrasive object actually was: whether it was a sort of sand paper, or some sort of abrasive powder or other abrasive utensil.

Maddalena Cima di Puolo writes about luxury articles in the second essay, *La diffusione del lusso* (pp. 39-49), which made their way into Rome after the fall of the Hellenistic Kingdoms and brought about changes in taste. The home became 'status symbol' more than anything else and household objects were designed in imitation and admiration of the Hellenistic models. The decorative value of utensils became very important. Moreover, the new style leads to simpler and cheaper imitations (for more information on this subject, see P. Zanker's significant article, *Die Villa als Vorbild des späten pompejanischen Wohngeschmacks*, *Jdl* 94 (1979), 460-523. The article is not discussed here, although it is included in the general bibliography on p. 296). It should be pointed out, however, that generally speaking, her very lengthy introduction on luxury is not always to the point.

Emilia Talamo Vattimo's and Maddalena Cima di Puolo's essay, *La domus: gli ambienti e gli arredi* (pp. 51-79), covers the rooms and furnishing of the house, especially the bronze furniture. As in the preceding essay, we are told here about the new choices, tastes and fashions that came into being in the last century of the Republic under Greek influence. The enumeration of the difficulties one encounters when studying the bronze household furnishing (p. 55) is very good. Many objects were already melted down in Antiquity and many ended up early in private collections and the context in which they were found, is, therefore, unknown. Another problem in determining the dating stems from the popularity of bulk production; often appliques are found with no traces of the wood to which they were attached. According to the author, one way of reconstructing wooden furniture with appliques is by studying the representations on marble reliefs and wall-paintings. It is doubtful, however, whether this method provides a viable solution. She mentions a number of examples of wall-paintings of which it is almost certain (except for fig. 17) that they are Roman copies of Greek prototypes. Therefore, they can hardly serve as representations of Roman furnishings (moreover, figure 118, Venus and

Mars, is not under exhibition in the Museo Nazionale at Naples but in situ, in the tablinum of the house of M. Lucretius Fronto at Pompeii). Representations on wall-paintings can only be used as examples of Roman furnishings when it has been established beyond any doubt that they are Roman originals, which is rare! It should be noted that the discussion of the types of seats, especially the *solia* and the *sellae curules*, contains some dangerous conclusions based on representations of wall-paintings inspired by Greek originals. After a general introduction on the Roman house, this chapter goes on to study doors, strong-boxes with metal fittings for valuable objects (it should be pointed out that the Casa del Conte di Torino is better known as the Casa di Obellius Firmus), seats, tables and beds.

In the discussion on tripods and tables (pp. 63-68) we read: "Ogni letto, o, in qualche caso, ogni commensale, aveva a disposizione il suo piccolo tavolo che serviva da appoggio. Al centro, tra i letti, era disposto un tavolo più grande per sostenere i piatti da portata". Given the size of the preserved triclinia at Pompeii, the representations of people reclining during dinner and written sources, it is very unlikely that a table stood at each bed. Both sources suggest that generally there was only one table for all the eaters placed in the centre of the triclinium. The Roman convivium are probably confused here with Greek symposia, where tables were placed next to most beds.

A number of critical remarks are in order as regards the last part of this essay, which describes the beds (pp. 68-79). Talamo Vattimo distinguishes here between the *lectus* which she identifies as the bed most commonly used to recline on during meals, and the *torus*, on which one slept. It would be much better, in this respect, to distinguish between the *lectus tricliniaris* and the *lectus cubicularis*, as do the written sources. A cheaper alternative for the *lectus cubicularis* was the *grabatus* or *grabatulus*. The term *torus* is primarily poetic and can also mean a bed used to recline on during meals (see: Iuvenalis, *Sat.* 1.136; Martialis, *Ep.* 9.22.5-6; Petronius, *Sat.* 40).

In her discussion of attachments to beds (p. 70), Talamo Vattimo describes the bases of turned bronze legs as follows: "un piccolo plinto modanato a forma di lira all'interno del quale si andava ad inserire una traversa di legno che, assicurando tra loro i due lati lunghi del letto, conferiva una maggiore stabilità alla struttura generale". However, the short are the very sides connected, as we can clearly see in the reconstructions of figures 36, 119, 139 and 142. According to Talamo Vattimo, the arrangement of the different bronze elements which comprised the bed legs, depended on the personal taste and imagination of the artisan or the customer. If this is so, why is it that the arrangement of the bronze elements in almost all Roman bed legs is so uncannily the same, as can clearly be seen in the numerous illustrations of bed legs in the book itself?

It should also be noted that Hyginus, the writer of fables who probably lived in the second century A.D., is not the same Hyginus referred to here as the "famoso liberto di Augusto". On p. 75 the *eborarii citrarii* are referred to as experts in the inlay of ivory and Lebanon cedar. *Citrus* and the cedar were not one and the same tree; the

former was most probably the same species we know today as *Callitris Quadrivalvis*, a point already made by H. Blümner (*Technologie und Terminologie der Gewerbe und Künste bei Griechen und Römern II*, Leipzig 1879, 274).

In her interesting essay on lighting in Roman homes (*L'illuminazione della domus*, pp. 81-101), Barbara Pettinau also notes the Roman imitation of Greek luxury articles, a development which also gave rise to the emergence of bronze lamps as symbols of social and cultural status. Bronze vessels, categorized into kitchen utensils, table ware, toiletry and decorative vessels, are discussed by Maria Elisa Micheli (*Il vasellame domestico* pp. 103-129). In her view, the possession of luxurious vessels is a symbol of "ostentazione", of the nouveau riche as differentiated from the old *nobilitas*.

The catalogue (pp. 257-288) lists 127 items. There are photographs of all the items listed in the catalogue, of which many are in colour in the chapters preceding the catalogue, and others in black and white in the catalogue itself. Surprisingly, a number of inventory numbers are missing without any explanation: cat.nr. 9 (London, British Museum); 17 (Torino, Museo Civico); 21, 22, 24, 118 (Napoli, Museo Nazionale); 31 (Chieti, Museo Nazionale); 43 (Modena, Museo Civico); 51 (Paris, Louvre). Other objects with no inventory number, however, are explicitly indicated as such: 30, 44, 73. The remark made in the description of cat.nr. 46: "senza misure", is amusing; moreover, is this really a bed, it looks more like a bench?

According to Sabatino Moscati, who wrote the preface, the value of the work lies in the fact that it breaks the barrier between academic and popular writing. The authors certainly have succeeded in doing this, the essays are lucid and interesting to archaeologists and interested laymen alike. Furthermore, the illustrations have been chosen with great care for their interest and presented in beautiful, often full-colour lay-outs.

S.T.A.M. Mols

RIVISTA DI STUDI POMPEIANI. Vol. II (1988). Roma: "L'Erma" di Bretschneider, 1989. 293 pp.: ill. (some col.); 29 cm. – ISBN 88-7062-673-3.

The second volume of the *Rivista di Studi Pompeiani* appeared in 1989, containing more articles and discussions than its predecessor (cf. *BABesch* 1990, 197-198). It can be seen as a tribute to Alfonso de Franciscis, Soprintendente of Pompei from 1961 until 1977, who died 18 February 1989 at the age of 73. The present Soprintendente, Baldassare Conticello, provides us with a necrology and the bibliography of De Franciscis. This is followed by De Franciscis' last article, a monography about the Casa di C. Iulius Polybius (IX 13, 1-3). It is merely "il punto di partenza per la pubblicazione" of the house, but for the time being the article is the first coherent survey of the building, with plans and several photographs.

Another house on the Via dell'Abbondanza is treated by Christopher Parslow: the Praedia of Julia Felix (II 4, 1-12). This immense house, occupying an entire block



north of the amphitheatre, was first excavated in the 18th century, then reburied, and finally exposed as a whole during three campaigns in the 20th century. Parslow gives us in short the history of the excavations, based mainly on the original documents in the archives of Naples and Pompei. Very interesting are the plans of the Praedia drawn by Karl Weber, one of which is axonometric, according to Parslow "the earliest known example of a Pompeian building so depicted". Parslow's study of other unpublished drawings by Weber will be published in the proceedings of the congress 'Ercolano 1738-1988'.

As in the first volume, the *Rivista* has several illustrations in colour, mostly dedicated to wall-paintings. In this way the article by Anna Gallo about paintings representing Ariadne abandoned by Theseus becomes a very nice survey of a pictorial theme. Colour also enlivens some reports of the Ufficio Scavi. The first concerns the excavation report of the Casa dei Casti Amanti (IX 12, 6-7), a house where some beautiful paintings were found, as well as several spectacular objects, such as a statuette of a boy or Eros. Another report deals with the Terme Suburbane, a bath complex with well-preserved wall-decorations, containing a.o. erotic scenes. The situation of the villa rustica at Gragnano, SS. Sorrentina 145, is also amply illustrated; here a boar hunt is depicted, not unlike hunting scenes in mosaics from North Africa.

But also without colour many contributions remain important and interesting. Especially the survey of the activities of the Soprintendenza Archeologica at Pompei, Pompei-Suburbio, Stabiae and Ercolano is extremely valuable. One small failure has to be noted here: on the cover the journal gives the ISBN number of volume I (88-7062-634-2); inside the right number of volume II (88-7062-673-3) is mentioned.

With this second volume the *Rivista di Studi Pompeiani* shows that it is a journal which has the right formula: a well-illustrated, balanced mixture of substantial articles, reports, and discussions.

Richard de Kind

ANTONIO GONZÁLEZ BLANCO, F. JAVIER FERNÁNDEZ NIETO, JOSÉ REMESAL RODRÍGUEZ, *Arte, sociedad, economía y religión durante el Bajo Imperio y la antigüedad tardía: homenaje al Professor Dr. D. José Ma. Blázquez Martínez al cumplir 65 años*. Murcia: Universidad de Murcia, Area di Historia Antigua, 1991. 582 pp.; 24 cm (Antigüedad y Cristianismo. Monografías históricas sobre la Antigüedad Tardía; 8).

This Spanish Festschrift was offered to prof. Blázquez Martínez on the occasion of his 65th birthday by pupils and colleagues from the University of Murcia and other centres of learning. The bulky volume of c. 580 pages contains over thirty contributions, divided into five major sections. These are: *Política, Sociedad y Religión* (15 contributions); *Urbanismo* (6 contributions); *Economía: Comercio y Industria* (4 contributions); *Necrópolis* (3 contributions); *Mosaicos* (3 contributions). The division between the sections *Urbanismo* and

*Economía* is not always logical: whereas the economical history of Carthago-Nova was ranked under the former, the site of a small rural settlement was discussed under *Economía*. Also, why the *Noticiario Arqueológico* (the stratigraphy of the site of Begastri) was placed separately at the end of the book is not explained by the Editors.

The first section, as said above, focusses on Policy, Society and Religion, and contains articles on a variety of subjects: the letters of Synesius of Cyrene, Zosimus as a witness of the ideological conflicts of his age, Ep. 25 of Gregorius of Nyssa, the lynching of Bishop George in Alexandria, but also the *collatio lustralis* in the fiscal policy of the Visigoths, and Justinian's marriage to Theodora. Two other articles in this section I will discuss below more extensively, because both stretch the importance of late-antique Spain for Byzantine politics: A. González Blanco on Stephanos of Byzantium, and Pedro Barceló on the rôle played by the Iberian peninsula in the religious policy of Constantius and, after him, Constantine.

The article of González Blanco is titled *Una fuente indirecta para el conocimiento de la España bizantina: Esteban de Bizancio*. Esteban, or Stephanos as I prefer to call him (see below), lived in Byzantium during the age of Justinian; from his hand is known, among other works, a description of the towns and people of Spain. From his epitome results that the northwest of the peninsula was complete terra incognita to him, and, as González Blanco observes, several of the great Hispanic centres of the Roman age are missing in Stephanos' work (e.g. Emerita, Corduba). The bulk of information he gives concerns the towns and people of the eastern and southern peninsula, whereas he also had some knowledge about Lusitania. Stephanos knew something about an important point of reference: the Columns of Hercules, and had heard about the Pyrenees. He also knew about the tripartition of Spain in Roman times, and is thoroughly informed about Hispania Baetica. The phenomenon of Greek colonization is referred to when he discusses the site of Emporion, and Hannibal and his conquest are also familiar subjects: much is, obviously, taken from Polybius. Nowhere, however, the Roman conquest of Spain is mentioned.

Confronted with these and other omissions González Blanco tries to formulate three hypotheses about Stephanos' possible sources and his selection from their works: 1) Stephanos used only Greek sources that refer to the protohistory of the peninsula, 2) he uses only Greek sources, but includes those referring to Roman Imperial times, and selects those of interest to him, 3) his goal was the composition of a more thorough study of the towns within Byzantine dominion. This third hypothesis is sustained by the fact that Stephanos refers little to Gallia, and practically never at all to the German provinces and to Great Britain.

In the conclusion of his article, González Blanco refers to a tenth-century Byzantine work, whose Latin title *De administrando imperio* was translated from the Greek by the Dutch scholar Johannes van Meurs in the early seventeenth century. This Byzantine work is more or less an

educational manual for a young noble Roman, i.e. the son of the Emperor. In it, parts of the text of Stephanos were preserved and the author demonstrates that the Emperor Constantine Porphyrogenitos had in his possession the entire text.

González is convincing in his statement that Stephanos certainly never attempted to write a geographical history of Spain; his mentality is rather of a philosophical nature, and like Justinian, in whose age (and for whom?), he wrote he was mainly interested in the Mediterranean world than in a reconstruction of the integral Roman Empire. Pedro Barceló discusses the religious tolerance executed by Constantius, and from 306 by Constantine, in the peninsula. A general view holds that the Iberian peninsula played a secondary rôle in the religious policy introduced by Constantine, a rôle that continued under his immediate successor and culminated during the reign of Theodosius. A predominant factor apparently was the slow consolidation of Christianity in the policy of the late-antique Empire, where we have to remind ourselves that the most fundamental decisions in the process of Christianization took place in the traditional urban centres: Rome, Ephesos, Alexandria, Carthago, and the like. From the sources it is certain that since 285 Spain was part of the western dominions of Maximian, and that from 292 onward he divided the power with the Caesar Constantius. From Maximian it is known that he fully carried out the persecutions ordered by Diocletian, whereas Constantius is known to have followed a considerably milder strategy.

Therefore, it is important to see whether, from the latter's elevation on, Spain fell directly under the yoke of Constantius, or that it remained in the hands of Maximian. The answer is given by Lactantius (VIII, 3): the very rich provinces of Africa and Hispania, like Italy, fell under Maximian. Orosius (VII 25,15) explicitly tells us that only after Maximian's abdication in 305 did Spain fall under Constantius, *vir tranquillimus*, who obviously was content with Hispania and Gallia, because he ceded the rest to Galerius. Who, then, did inherit Spain after Constantius' premature death in 305? According to Barceló it is highly improbable that Severus, elevated to the rank of Augustus in 306, imposed his authority upon Spain. From a careful scrutiny of the sources it becomes evident that the peninsula was, from the very beginning in 306, an integral part of Constantine's, as natural son of Constantius; in the spring of 306, to be exact, Galerius acknowledged Constantine's "seize of power".

One of the first measures of Constantine was the proclamation of a *prima sanctio* by which the Tetrarchal measures concerning all religious matters in general were withdrawn. This fact is indirectly confirmed by Eusebius; Barceló rightly warns us, however, that Eusebius' information of matters concerning the Western Empire was less thorough than that of Lactantius.

The author concludes by emphasizing that the very beginning of Constantine's reign in Spain lies in 306 rather than in the familiar year of 312, and that it is marked by new relations between Church and State, that is, by a policy of religious tolerance.

The second section of the book contains six articles on Urbanism, among whom I mention Espinosa's interesting contribution on the fifth-century history and archaeology in the Ebro-valley, as well as García-Gelabert's article on the archaeological site of Castulo. A valid source of information is the article that opens this section: Luis García Moreno on isolated rural settlements in the peninsula during the fifth-seventh centuries. In his conclusions he remarks that the dispersed settlements are always due to specific socio-economical and physical conditions of the region (crops, olives etc.), and that this form of Habitat will continue to exist also in the following ages. The Spanish antique sources he quotes are valid, and often unknown outside Spain. It is a pity, however, that the author did not briefly include information about the rural situation in this early-medieval period in Vandalic Africa and in Longobardic and Byzantine Italy. As a result from recent excavations and surveys we begin to have a general knowledge of the nature and dispersion of the settlements there.

The third and fourth sections discuss Economy and Necropoleis, whereas the fifth and last is dedicated to mosaics in late-antique Spain. The two types of mosaics that feature here are the theme of the Hunt, and of the Thiasos. In a discussion of the first theme, G. López Monteagudo does include a large range of hunting-scene-mosaics, among which feature the wellknown examples from Apamea and from Piazza Armerina. It is, therefore, a pity that the author never even mentions Ostia where excavations have yielded at least some important hunting scenes (the most famous one is the floor-mosaic in the circular hall of the baths of the Seven Sages, Reg. III x). The second article on mosaics is written by Luz Neira Jiménez. She makes a very important observation when she emphasizes that many thiasoi do come from bath complexes, but that a surprisingly high number was found in houses or villae, or even in a tomb. We will, therefore, in the future have to be more careful when we, sometimes too automatically, assume that marine scenes must come from baths. Both articles are well-illustrated; the quality of the photographs is not very good.

All articles were written in a very lucid Spanish, which should not create a serious problem to a non-native speaker. Unfortunately, this cannot be said of the English summaries which precede each article; these are marred with misspellings that an editor should not have admitted, for instance, "inminente" instead of "imminent", "inicial" instead of "initial", "circunstance", "posibility", and, in a beautiful mixture of Spanish and English, "los years", "personal y juridical". Also, some Spanish names are not properly translated, so that we encounter one Esteban de Bizancio in an English context: not all foreign readers might recognize in him the sixth-century author Stephanos of Byzantium. Moreover, the handling of English grammar is far from perfect and makes several sentences completely incomprehensible.

These editorial shortcomings are all the more a pity, because the volume as a whole offers some very interesting and new material to the reader. Late-antique and Visigothic Spain is a virtually unfamiliar subject for stu-

dents of the early-Christian world which tends to focus on the great centres of Christianity: Rome, Constantinople, Carthago, and the like.

Thea L. Heres

ALFONSO DE FRANCISCIS, *Il sacello degli Augustali a Miseno*. Napoli: Arte Tipografica, 1991. 108 pp., 73 ills.; 24 cm. — LIT. 30000.

Dans la zone du port de *Misenum*, au pied du versant SE de la colline de Punta Sarparella et non loin des ruines d'un théâtre (actuellement presque invisibles), furent découverts fortuitement en 1968 les restes d'un ensemble monumental, formé de trois chambres donnant sur une cour à portiques. Plusieurs des inscriptions retrouvées permirent immédiatement au surintendant aux antiquités de la région de ce temps-là, Alfonso De Franciscis, à identifier l'ensemble comme un lieu destiné au culte de l'empereur et siège du collège local des *Augustales*. Depuis la présentation de la découverte au "convegno" de Tarente de 1970, archéologues et historiens attendent patiemment la publication exhaustive de ce monument, non seulement remarquable du point de vue architectural et pour son équipement sculptural, mais également très important pour l'histoire et la topographie de *Misenum*. Malheureusement le phénomène de bradysisme le long des côtes de la région phlégréenne continue à rendre extrêmement difficile l'étude complète de l'ensemble et le présent ouvrage posthume de Alfonso De Franciscis (décédé en 1989) — paru grâce aux soins de son élève Nella Castiglione Morelli — ne constitue pas encore l'édition définitive longuement attendue.

S'il est toujours très mal aisé et délicat de rendre compte d'un livre auquel l'auteur n'a pu mettre la dernière main, il l'est encore davantage pour le présent ouvrage qui se trouve encore en grande partie à l'état d'ébauche: un ensemble de notes, réflexions, éléments de comparaison et données bibliographiques rassemblés en vue de la publication du monument. L'état d'élaboration des 14 chapitres est très variable. A peine ébauchés sont les premiers chapitres sur l'histoire de la recherche à *Misenum*, sur les circonstances de la découverte et sur la technique de construction. Plus avancés — mais loin d'être exhaustifs — sont les chapitres suivants avec la description de la cour antérieure, de la chambre latérale Q et de la chambre centrale, le *sacellum* proprement dit. À nouveau très sommaires sont les descriptions de la chambre latérale E et des portiques latéraux. Suivent quelques chapitres d'interprétation et de synthèse, touchant différents aspects archéologiques et historiques de l'ensemble en question: l'architecture des édifices connus comme siège des *Augustales*; la galerie de portraits impériaux comprenant des statues de Vespasien et de Titus, une statue équestre de Domitien, transformée plus tard en Nerva, et des bases de statues de Trajan et de Marc Aurèle (ou L. Verus); l'organisation des *Augustales* de *Misenum*; la séquence chronologique de l'ensemble, construit à l'époque d'Auguste, remanié à l'époque Antonine et détruit vers la fin du second siècle à cause d'événements sismiques; les nouvelles données recueillies pour l'histoire et la topographie de *Misenum*.

Finalement, après un dernier chapitre à peine entamé sur un éventuel édifice d'*Augustales* à *Puteoli* et quelques notes de la curatrice de l'ouvrage, nous trouvons encore quelques appendices bibliographiques assez bien documentés.

Même tenant compte des circonstances pas toujours favorables de la fouille, l'illustration de l'ouvrage est très insuffisante: un plan général de la zone qui remonte déjà à l'ouvrage de Beloch de 1890, un plan très sommaire du monument fouillé (que nous trouvons déjà e.a. dans le volume *Baiae-Misenum* de la *Forma Italiae* paru en 1979) et un nombre d'illustrations qualifiables en grande partie comme "photos d'amateur". Le manque d'une documentation graphique même sommaire — qui aurait pu combler nombre de lacunes dans le texte — est autant surprenant que décevant.

Frank Van Wouterghem

R.M. VAN HEERINGEN, H. KARS, H. SARFATIJ EN G.H. SCHEEPSTRA (red.), *Archeometrie in Nederland: wat voorbeelden*. Amersfoort: Rijksdienst voor het Oudheidkundig Bodemonderzoek, 1990. 82 pp.: ills., tabs., 30 cm (Nederlandse Archeologische Rapporten; 9). — ISBN 90-73104-01-7.

For a number of years, the archaeological section of the Netherlands Organization for Scientific Research has had a policy of favouring technological research in its grants. A special committee has been appointed to select and judge applications in this field; one of its activities has been the publication of a pocket guide to techniques of dating, chemical and physical prospecting, and mineralogical analyses of interest to archaeologists (H. Kars red., *Archeometrie in Nederland: een overzicht, de mogelijkheden*, 's-Gravenhage: Stichting ARCHON, 1988). Another contribution has been the presentation of archaeometric research to the Dutch archaeological community by means of lectures and demonstrations at a conference in the fall of 1988; the seven lectures have been edited and assembled in the present booklet.

In the introductory note, Kars divides archaeometry into two domains: ancient technology, and modern hi-tech to assist in archaeological research. Right after having been mentioned ancient technology is dropped altogether; shining "scientific" gadgetry gets the full share: dating methods, field reconnaissance, and mineral and chemical analyses are offered as potentially powerful methods to answer archaeological needs. These latter, however, are assumed self-evident, and the current methodological debate is fully ignored. This may seem a bit sceptic (and it probably is), it should not detract from the merits of the volume which are many: archaeometric techniques can provide solutions to thorny problems.

I just translate the titles of the papers:

L. van der Plas, *Archaeometry: the way ceramic research should not be done*; C.E.S. Arps, *Bandkeramik adzes in Central Europe: lithics and sources*; J.B.H. Jansen & H. Kars, *Application of geochemical analyses in archaeology*; L. Runia, *Chemical analysis of prehistoric bones: problems and perspectives*; K. Anderson, *Geophysical exploratory techniques*; C.G. Langereis &



H. Kars, *Palaeomagnetic dating of the lime-kiln at Nijmegen*; J. van der Plicht & W.G. Mook, *Dating with radiocarbon*.

The contents of the papers are on an introductory level, so that even hard-headed non-scientific archaeologists can understand the gist of the stories; for which the editor and the authors should be praised. They should also be praised for their critical descriptions: all are concerned to discuss shortcomings and critical areas of the several techniques. If a companion volume could appear dealing with ancient technology I would be happy to recommend the two books together.

Pieter van de Velde

KLAUS RANDSBORG (ed.), *The birth of Europe: archaeology and social development in the first millennium A.D.* Roma: "L'Erma" di Bretschneider, 1989. 191 pp.: ill.; 29 cm (Analecta Romana Instituti Danici; suppl. 16). — ISBN 88-7062-622-8.

This volume brings together the results of an international archaeological symposium on the evolution of Western Europe in the first millennium A.D. organized by the Danish and Swedish Institutes at Roma in 1987. The book addresses three broad themes: the Decline of the Antique World, the Emergence of Western Europe, and the Integration of Barbarian Societies in the developments of these thousand years. Twenty-one older and younger historians (some) and archaeologists (many) have contributed to the volume: British, Danes, and Italians, but also a Dutchman, a German and a Swede. They come from different backgrounds: Marxists, Post-Modernists, Culture-Historians, and Functionalists are among them, and if the subject were not sufficient, this heterogeneity should be the reason to recommend the book — thus, students still hesitating between different convictions could find support for a continuing critical attitude, or for going for one or the other.

As described by editor Klaus Randsborg, the texts deal with the relations between the political organization and the economic basis, the interactions of the different societies, the development of the main social formations, and the changing conditions of living, mentality and cultural norms. The contributions have been grouped into six sections: The Archaeology of Long-Term Social Change; The Interaction of the Roman and Barbarian Worlds; Settlement Archaeology of Roman and Barbarian Landscapes; Social Structure, Exchange and Land in Migration Period Europe; Societal Development in Early Medieval Times; and Social Transformations in the Late First Millennium A.D. Of these sections, the first and the last consist of one article each, viz., an introductory article by the editor, and a conclusion by Richard Hodges. The Introduction (*Archaeological approaches to long-term changes of social practices*) presents a rather broad post-structuralist, Post-Modernist view of settlement archaeology — as may be expected from a one- and long-time Cambridgean. The uniqueness of context and content, both past and own, does not condemn the observer to fancy narrative, though: the individual is part of the broader patterns of social practices in time and space, and these "structures" can be traced,

discussed, and verified in archaeological research. As a horizon to the period under consideration, Randsborg notes the cultural marginality of Western Europe before the first millennium, which [consequently ?] could be easily conquered by the Romans. Soon however, temperate Europe became an "economic embarrassment" and its cities started to decline, giving place to a landscape of estates, small farms, and petty towns with cattle ranching becoming ever more important relative to agriculture. The social organization became correspondingly smaller-scaled. However, Roman technology and practice continued well into the seventh century (and partially even into our days). In that century the agriculture/cattle balance started to shift again, and by the end of the millennium new cities and permanent villages became established all over temperate Europe. I found it surprising that notwithstanding his critical stance, Randsborg accepts without discussion important parts of received archaeological wisdom: the marginality of barbarian Europe (above), and also the opposition between the "highly competitive social structure" of the Migration Period and the seemingly rather more fraternal one of the Christian era. In both cases the most conspicuous archaeological material (texts and temples, resp. grave furniture) is accepted as reflecting the true state of society instead of highly particular pre- and post-depositional factors — the "positivist fallacy" on which Snodgrass has been lecturing time and again (e.g., A.M. Snodgrass, *An archaeology of Greece*, Berkeley: University of California Press, 1987, p. 38).

At the end of the book Hodges (*Archaeology and the class struggle in the first millennium A.D.*) goes into the same themes as Randsborg at the beginning. Comparison of the two papers is unfair to Randsborg, since he is writing as an editor, while Hodges is responsible for his own text only. Because of the role differences, Hodges can be much more positive (when not outright provocative), and that makes for pleasant reading. Hodges' major theme is to demonstrate that archaeology "enables us to break free of the tyranny of the written word and historical elitism that have dominated [these studies]". For that he starts with a methodological criticism of Finley who "like so many historians" thought about archaeology as consisting of "individual documents — an approach he has criticized in his own discipline" rather than collections of documents on similar or related themes. Archaeology "should be deployed in structured enquiries of the past involving a logical sampling of time and space". Such an approach reveals not only those who made history, but those denied it. "[N]o first millennium historian can do much more than tell us about those who made history, and their views on those denied history." Hodges observes that all studies on the transition from Antiquity to the Middle Ages are in terms of the elite; our perspective of the past as mediated by written sources is heavily distorted therefore. Much of this critique is substantiated by reference to Hodges' own fieldwork in Molise, Tuscany and Britain, a recurrent theme being the relations between the state or the upper class and the peasants; yet there was no class struggle as such but rather a development of the productive relations in different directions in different regions and in differ-

ent periods. Much of what he has to say he has written before, but this paper is a convenient summary of his views, both regarding contents and method.

Wedge in between these two quite different texts on the same topic is an attractive array of seventeen site reports, regional overviews, and general discussions. Neither a review nor even a full listing is possible, given the allotted space. However, just to convey the rich variety I will mention two papers in each of these categories: Manacorda and Zanini describe their excavations at the Via delle Botteghe Oscure in Roma, where they found remains of the ancient granary; and Ilkjaer comes up with a paper on the astonishing weapons deposit at Illerup-dal. More of a regional scope is Francovich' paper on the makings of medieval Tuscany, so conspicuously distinct from the Roman landscape; from Scandinavia Andrén writes about the beginnings of urbanization there — a comparatively late phenomenon (eighth century, with earlier beginnings) connected with the Viking "external exploitation" (Newspeak for "raids"). The general discussions in this volume are all concerned with the transition from Antiquity to Middle Ages. Thus, Steuer subjects ten statements on the transition from the mobile and even volatile Merovingian *Personenverbandstaten* to the feudal Carolingian empire; and Wickham deals with Italy in the Early Middle Ages where he sees two discontinuities: the fall of the state in the sixth century, and the rise of feudalism in the eighth. Mentioning these papers is no depreciation of the other ones in this book; on the contrary: my selection is for illustrative purposes only.

The book lacks a true conclusion; Hodges' essay deals mainly with the Western Mediterranean area, and the temperate part of Europe is left out. To me this is a lost opportunity, as a book like this could have been a step away from the still very much Italo-centric image of the period. On the other hand, the incorporation of so many papers on Western and Northern Europe as well as the generally non-urbanistic contributions render the book a valuable addition to any archaeological library.

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MICHAEL PFROMMER, *Untersuchungen zur Chronologie früh- und hochhellenistischen Goldschmucks*. Tübingen: Wasmuth, 1990. XXIII, 470 pp., 42 figs., 31 pls. ill.; 31 cm. (Istanbuler Forschungen / Deutsches Archäologisches Institut, Abt. Istanbul; Bd. 37). ISBN 3-80301758-0.

Quelques années après son oeuvre *Studien zur alexandrinischen und grossgriechischen Toreutik frühhellenistischer Zeit* (1987), l'Auteur a fait paraître un second volume, tout aussi imposant, volume qui cherche à réunir dans un seul ouvrage, l'histoire et le développement de l'orfèvrerie hellénistique. En un certain sens, on peut dire que les deux volumes se complètent: comme pour le premier volume, il s'agit d'un thème qui est lié à toutes les facettes de l'art hellénistique.

Généralement parlé, l'énorme matériel a été arrangé selon le genre des bijoux (colliers, différents types de bracelets, anneaux, pendants d'oreille etc.) et, ensuite, selon la répartition géographique. Plusieurs chapitres introductoires nous renseignent sur l'argumentation qui a mené à la classification présentée.

Il est significatif que le premier chapitre ait été accordé au motif du "noeud d'Héraclès", un ancien motif de caractère apotropaïque qui apparaît, ici et là, dans l'art grec archaïque, même dans l'art mycénien. Vers la fin du 4<sup>ème</sup> siècle, grâce aux trouvailles dans plusieurs tombes macédoniennes, nous en connaissons de nombreuses reprises en or, dans une forme artistique et joliment travaillée, souvent jointe à une (évent. à des) tête(s) de lion. Ici, M. Pfrommer rappelle à la mémoire que les rois macédoniens aimaient à faire remonter leur descendance jusqu'aux Héraclides et à Héraclès lui-même. Comme que ce soit, la richesse des tombes macédoniennes a fait connaître des spécimens extraordinaires du "noeud d'Héraclès", adaptés pour des diadèmes et des couronnes, comme fermoirs de colliers et de bracelets, comme enjolivement d'anneaux, peut-être pour une ceinture, même pour le centre d'un pectoral. Ce sont des oeuvres d'orfèvres experts travaillant pour la cour macédonienne. Dès la répression du pouvoir macédonien, le motif tombe plus ou moins hors d'usage.

Après la discussion détaillée concernant le "noeud d'Héraclès" nous suivons la description et l'analyse des différents genres des bijoux, chaque groupe étant pourvu d'une carte identique dans laquelle est indiquée la propagation du type en question dans le monde méditerranéen. Enfin, le *Catalogue* proprement dit commence (p. 207) par une série d'"ausgewählter Fundkomplexe" (FK 1-210) qui — le nom l'indique — ont l'avantage de préciser la répartition, le développement et la contemporanéité de certains détails stylistiques. Viennent ensuite les bijoux ornés d'un "noeud d'Héraclès" (HK 1-201), les bracelets à tête d'animal (TA 1-175), les bracelets en spirales (SR 1-70), les pendants d'oreille (OR 1-603). Le livre se termine par trois *indices*, un index général, un index des musées et des collections, un index des provenances.

C'est dommage que M. Pfrommer n'ait pas consulté notre *BABesch* (les *FastiArch* l'auraient renseigné!). A part une étude de M. Hemelrijk concernant des bijoux d'époque archaïque [*BABesch* 38 (1963), 28-51], il aurait connu la publication des bijoux montrés à l'exposition d'art classique dans les collections privées aux Pays-Bas [Leiden, Rijksmuseum van Oudheden 1975: *catalogue* nos. 796 et suiv., figs. 324 et suiv.; voir e.a. *BABesch* 50 (1975): *Goldschmuck aus einem geschlossenen Grabfund*, 43-45, figs. 114-117] et un article de M. Robert Lunsingh Scheurleer, Terracotta "imitation" jewelry, [*BABesch* 57 (1982), 192-196, figs. 1-8].

Une autre remarque c'est qu'en parlant de la bijouterie hellénistique, M. Pfrommer a accentué à plusieurs égards l'influence de l'art achéménide — aussi bien que l'influence de l'art ionien et de l'art de la région du Pont qui, l'un et l'autre, avaient déjà mis leur marque sur l'art achéménide naissant [voir e.a. les bols à panse arrondie et les amphores à anses zoömorphes, *BABesch* 66 (1991), 159, figs. 1-5].

Il faut se rendre compte que les racines artistiques de l'orfèvrerie reculent bien plus en arrière. Aussi, en parlant des bracelets à tête de lion, de bouquetin, de daim etc., il n'est pas exacte de les indiquer comme "bracelets de style achéménide", voir Pfrommer p. 1: "sicherlich achämenidisch ist die *Konzeption des Tierkopfarmreifs*". Hors les bracelets, offerts au Grand Roi par une délégation ionienne (R. Ghirshman, *Perse*, 1963, 174, fig. 220) et, par là, des cadeaux *non*-achéménides, nous connaissons un bracelet en or, à têtes de lion, d'une qualité exceptionnelle, bracelet trouvé dans une riche tombe à Ziwiyé [fin 7ème siècle: *BABesch* 37 (1962), 36, fig. 15; R. Ghirshman, *Perse*, 1963, 111, fig. 145. Cette pièce montre une si grande expertise et une telle artisticté que, sans doute, il doit avoir existé des pièces contemporaines plus simples et, même, des précurseurs.

Déjà, les fouilles à Marlik et à Hasanlu (fin 8ème siècle) ont fait connaître des vases en or d'une qualité supé-

rieure. Or, après la chute des chefs locaux, les artistes-orfèvres se sont dispersés emmenant avec eux leur expertise qui, sans doute, ne s'est pas perdue, mais qui a changé suivant les générations, suivant les régions, suivant les commettants. Tout en particulier les régions qui ont favorisé les vases et les rhyta à tête et à protome d'animal ont pu donner naissance au bracelet à tête d'animal.

Dans le vaste matériel que nous présente l'oeuvre de M. Pfrommer, les lecteurs intéressés trouveront toujours quelque remarque additive. Quant à moi, j'espère que l'Auteur acceptera mes remarques comme un témoignage d'intérêt commun. Car, avant tout, il y a lieu de le féliciter d'avoir rassemblé, au sujet de la bijouterie hellénistique, le matériel le plus étendu qu'on puisse désirer.

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